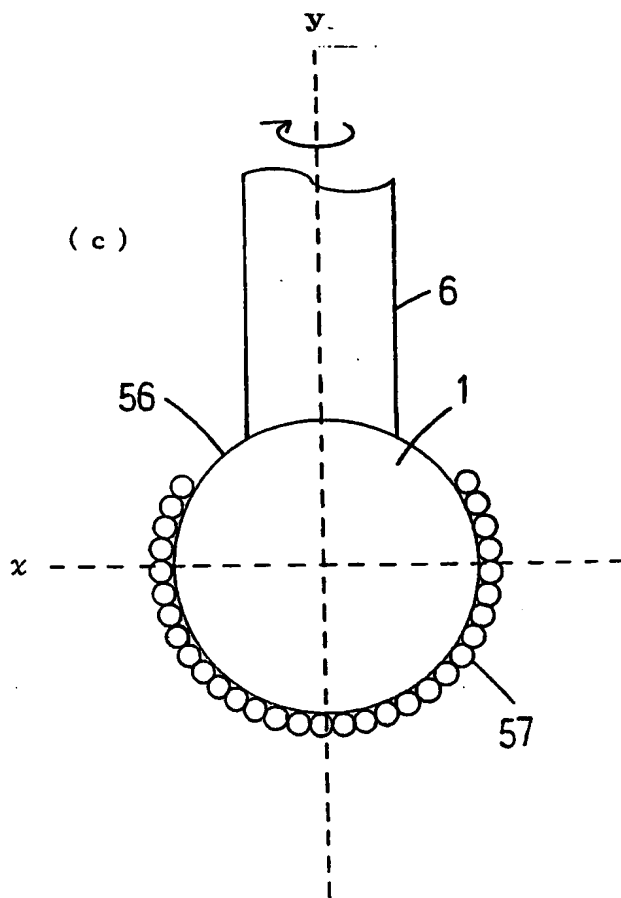
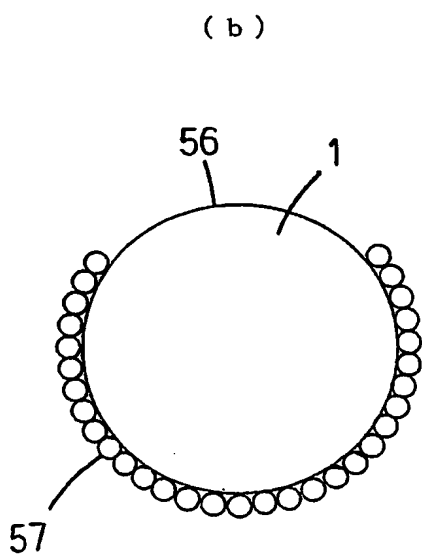
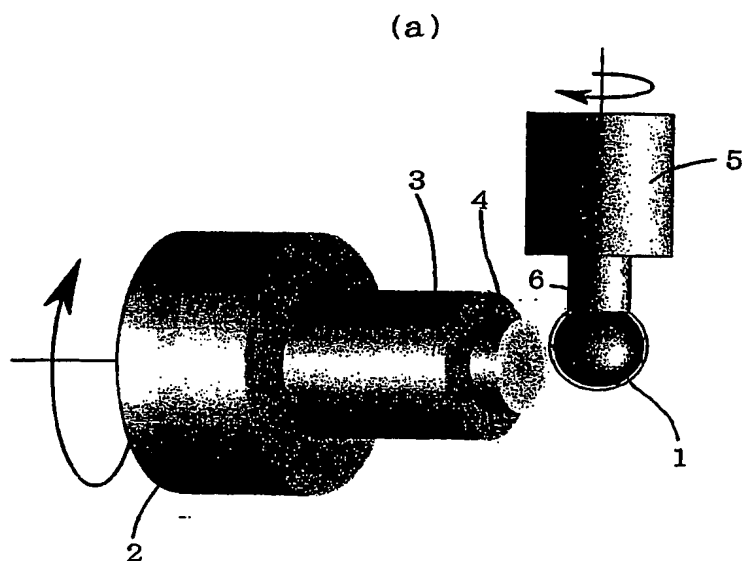
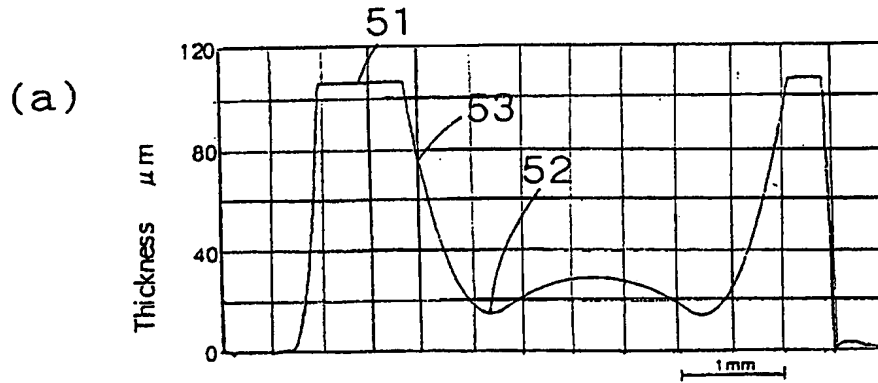


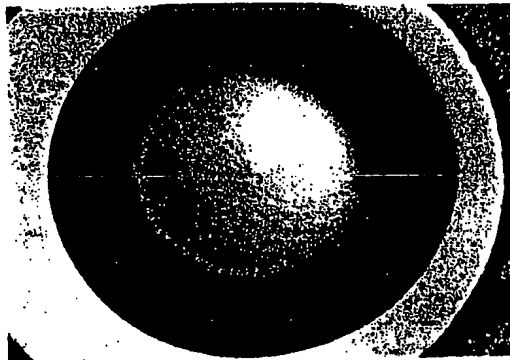
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Fig.1



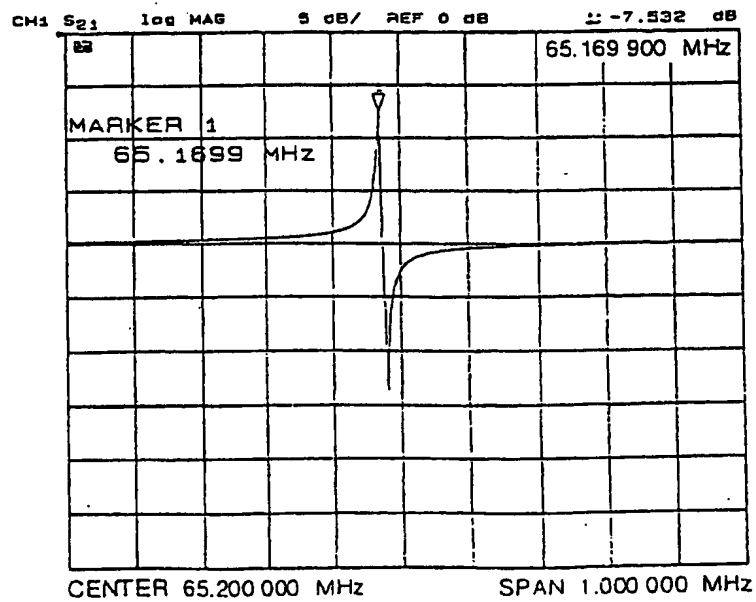
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Fig.2



(b)

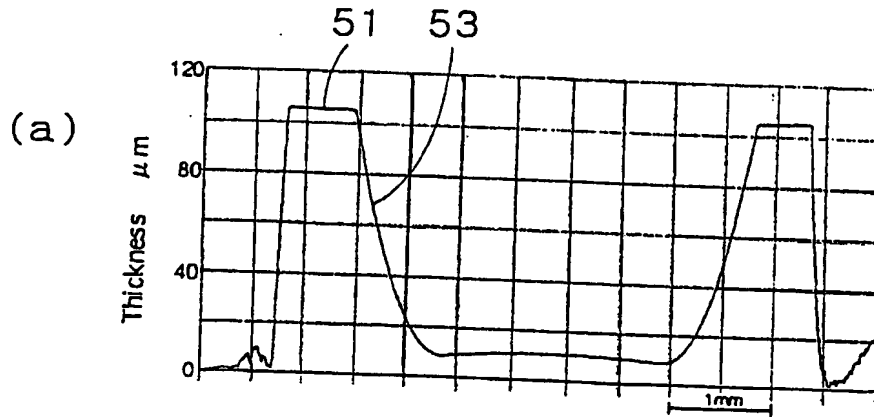


(c)

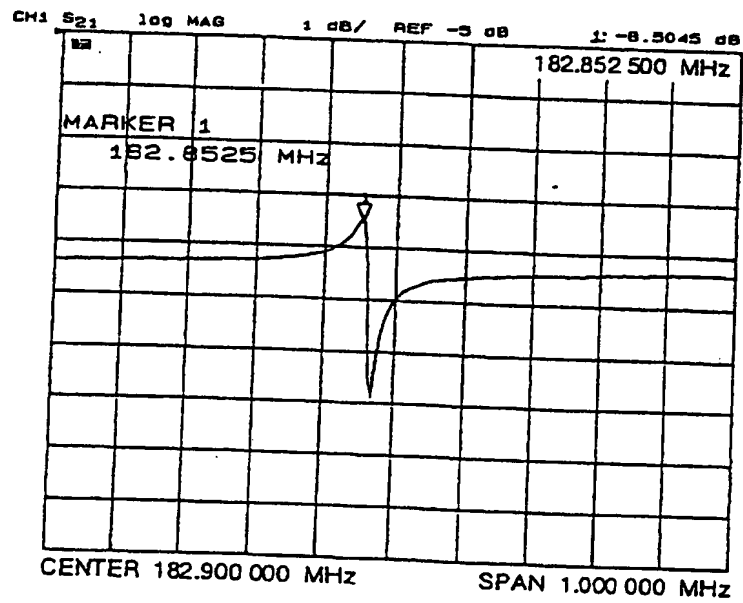


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Fig. 3

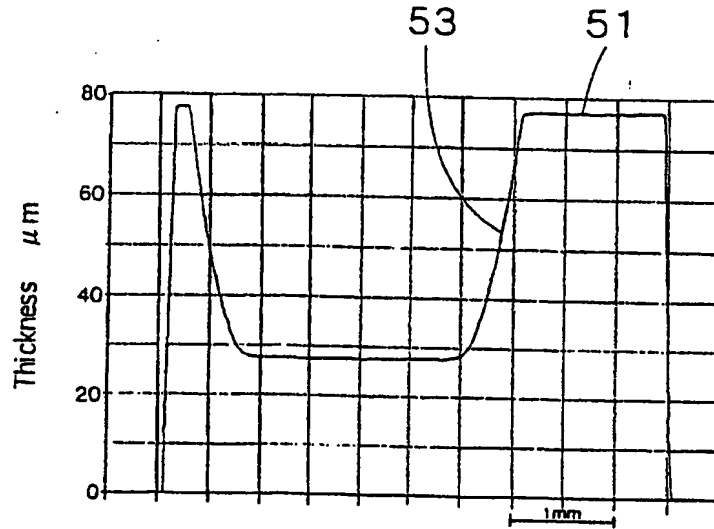


(b)

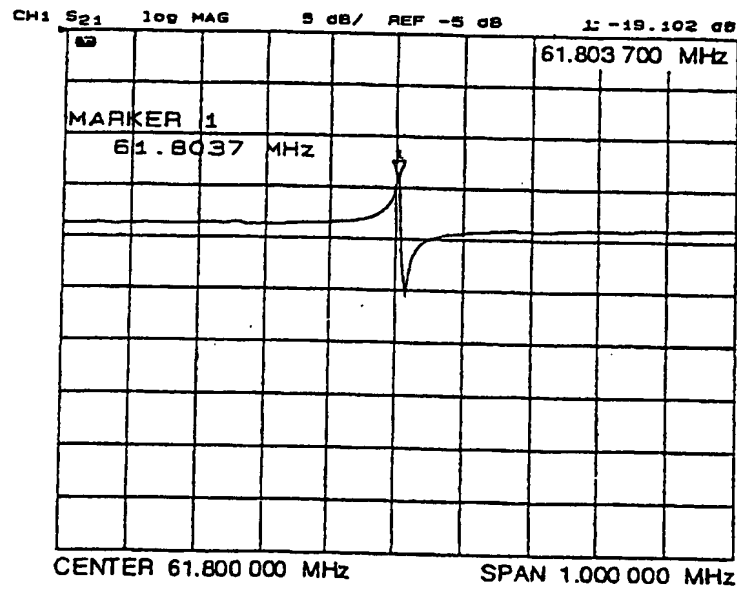


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Fig.4

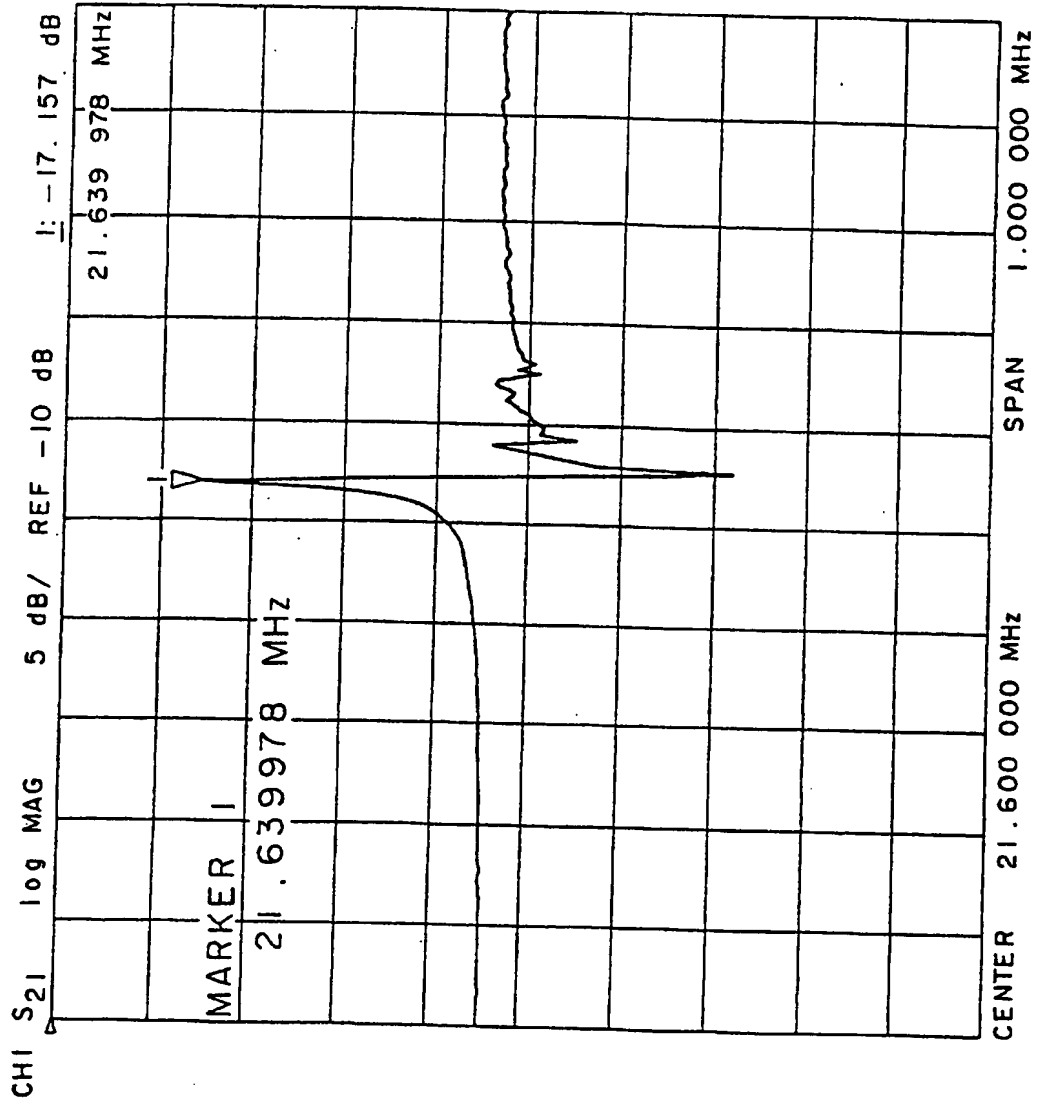
(a)



(b)

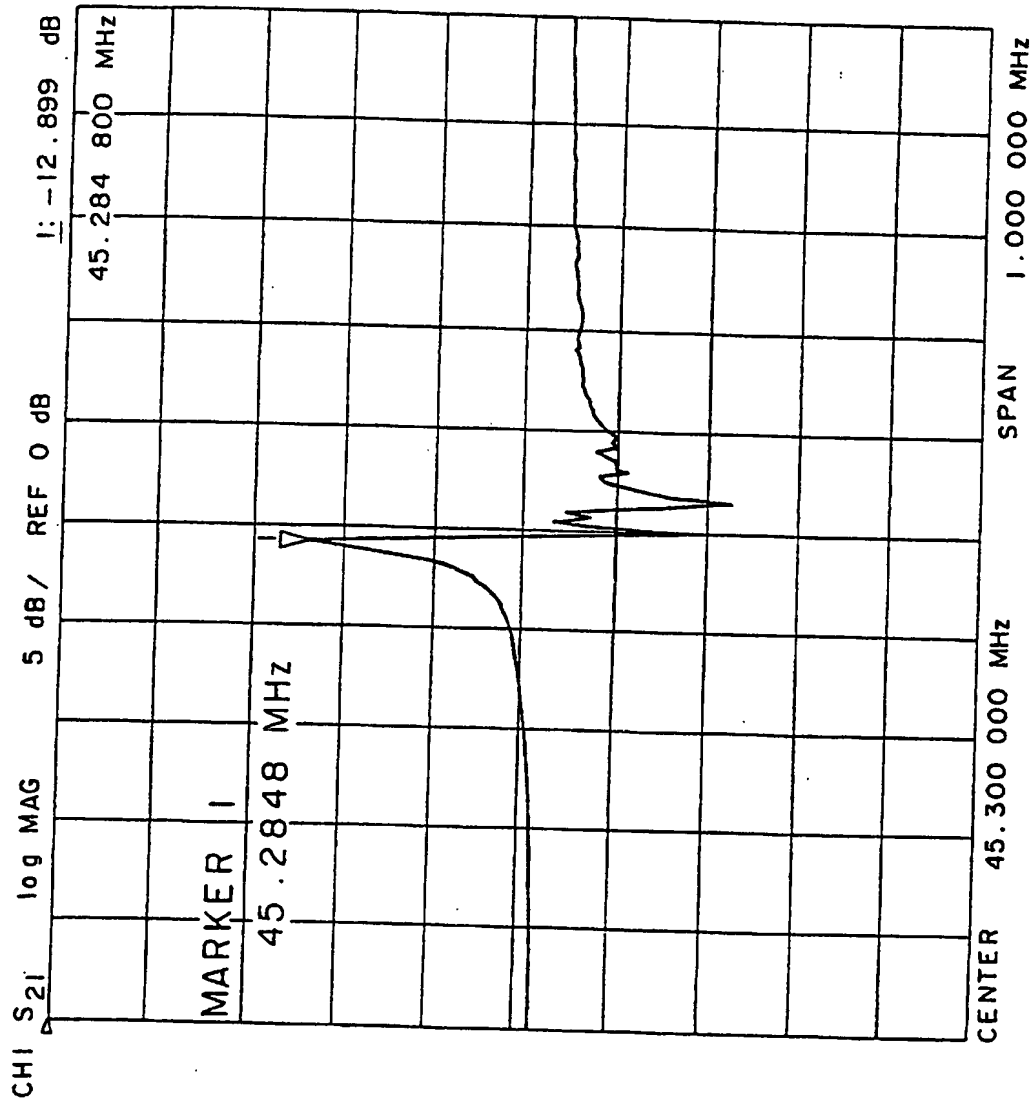


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Fig.5



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Fig.6



REF = 52460

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Fig.7

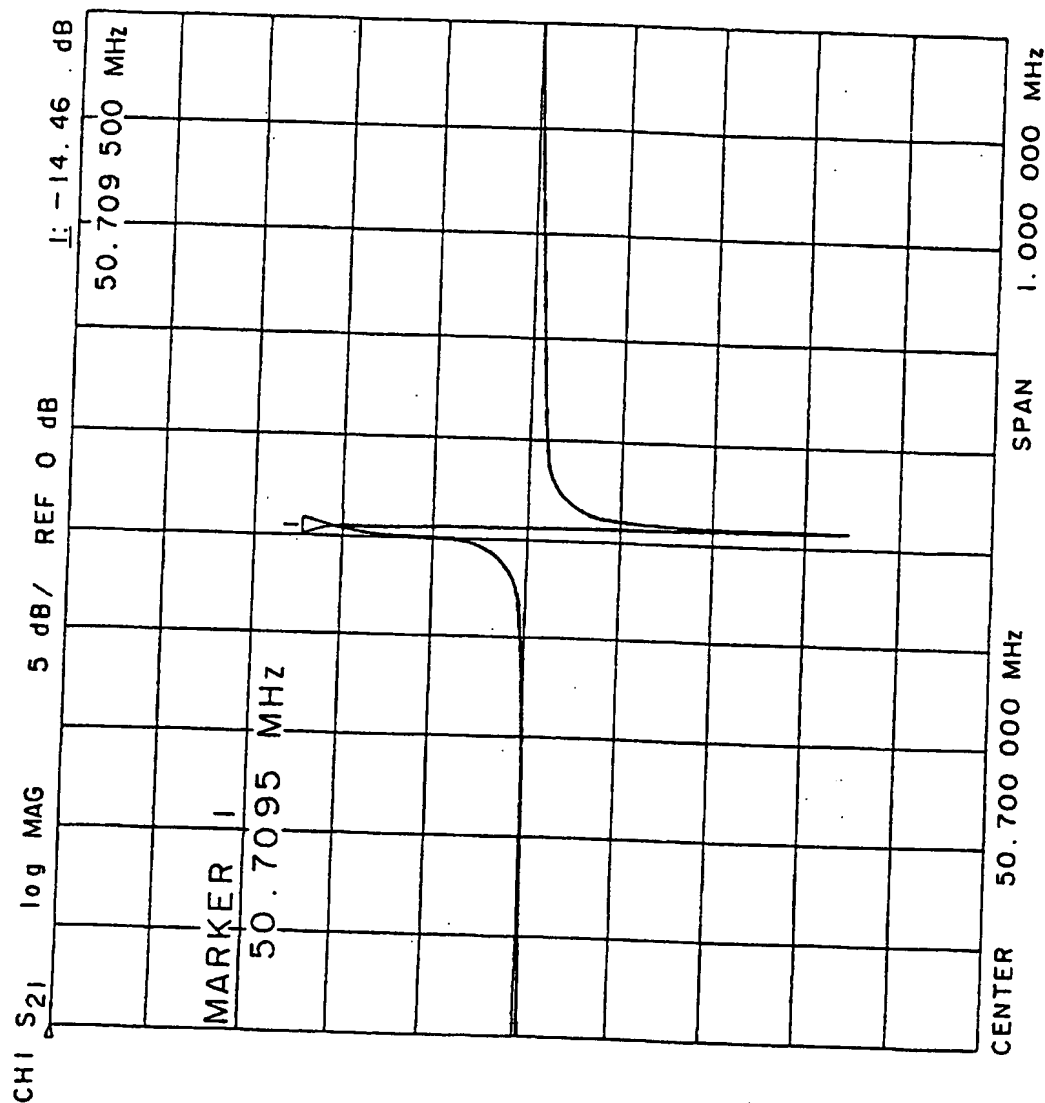
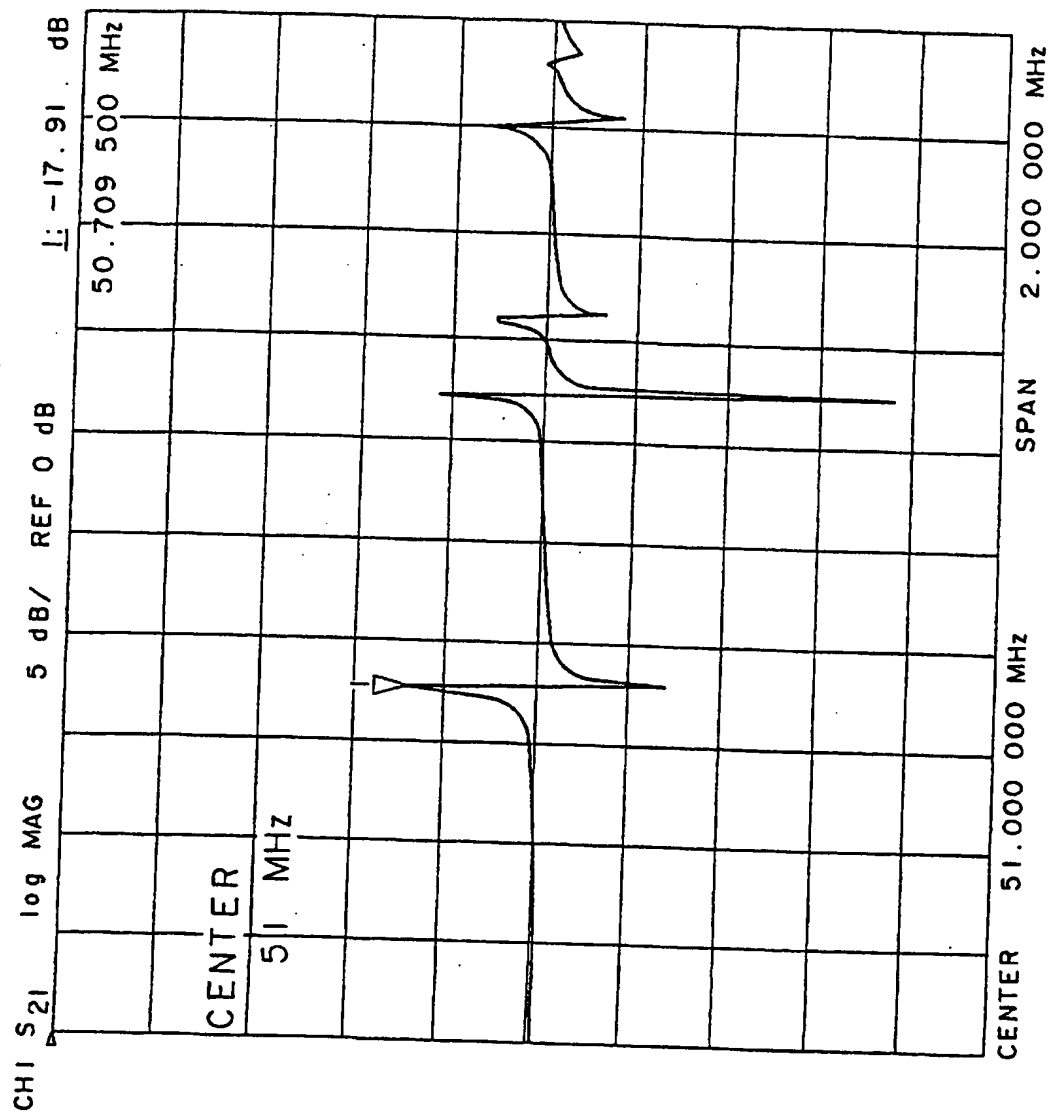
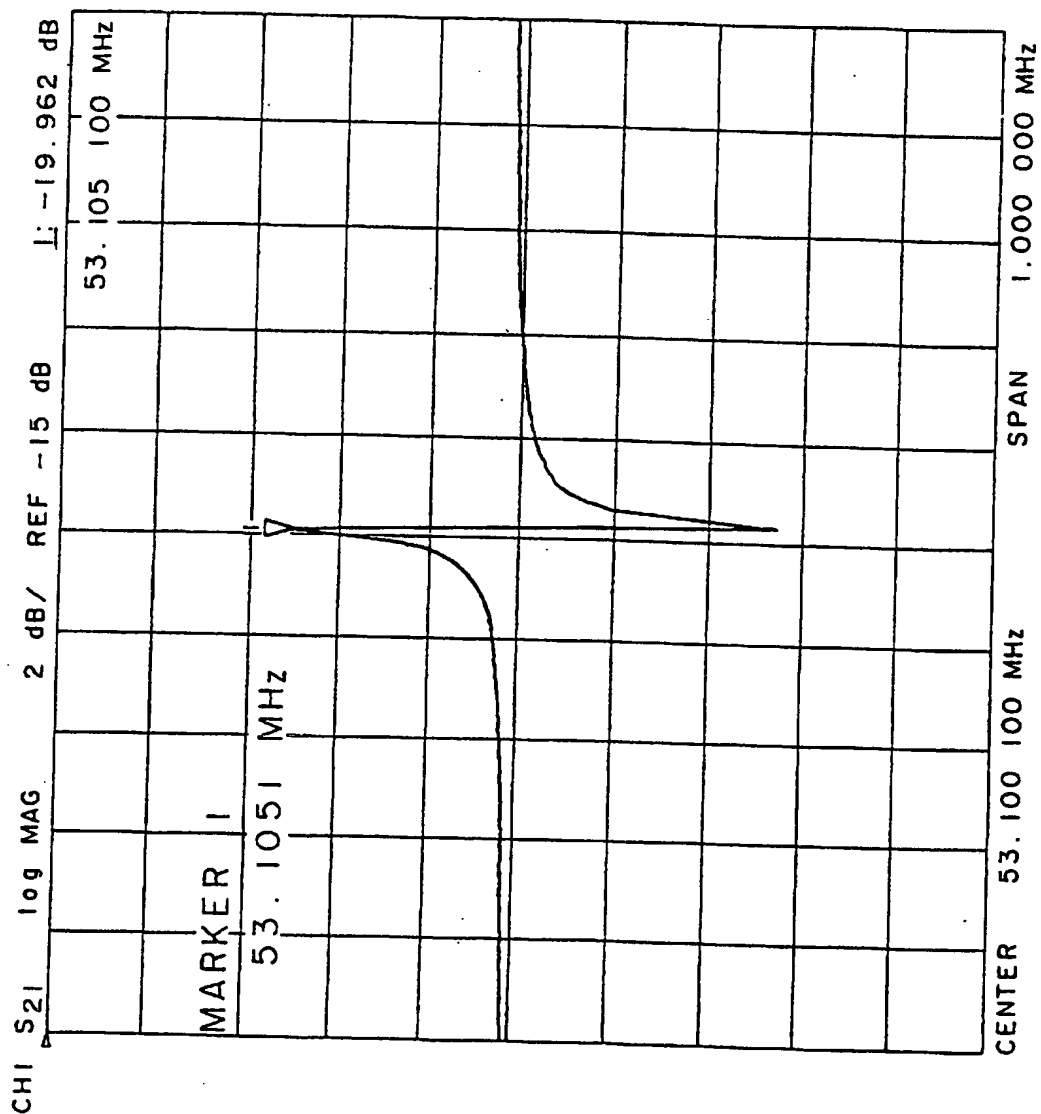


FIG. 7



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Fig.9



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Fig.10

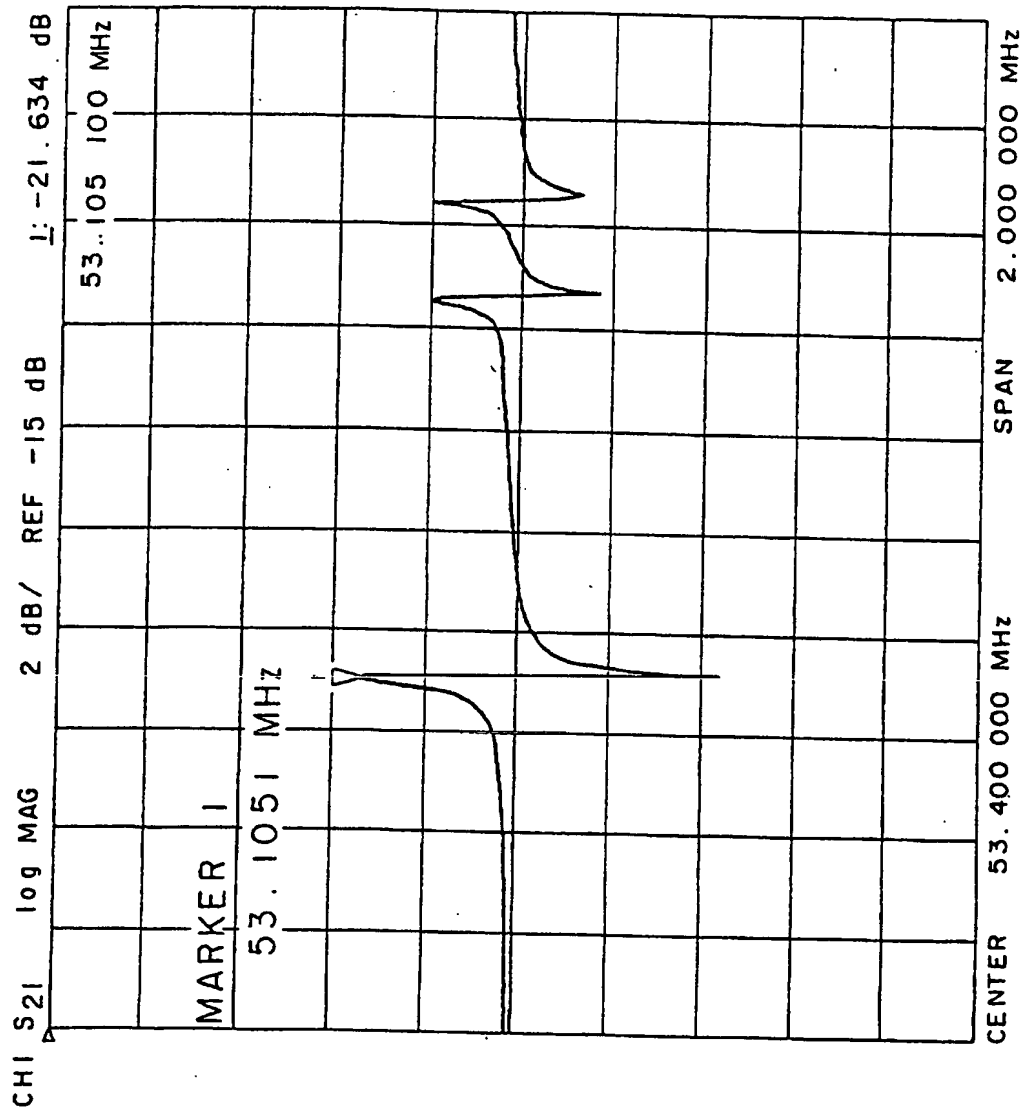


Fig.11

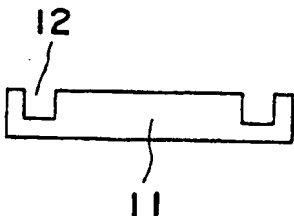
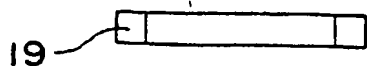


Fig.12



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Fig.13

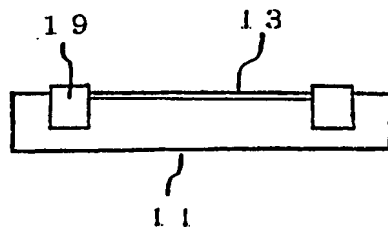


Fig.14

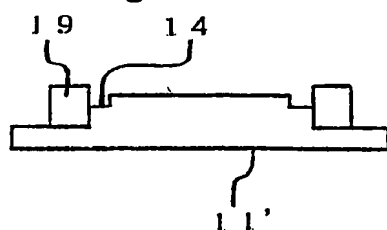


Fig.15

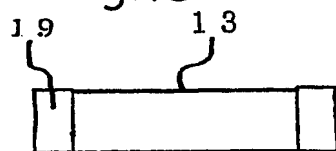
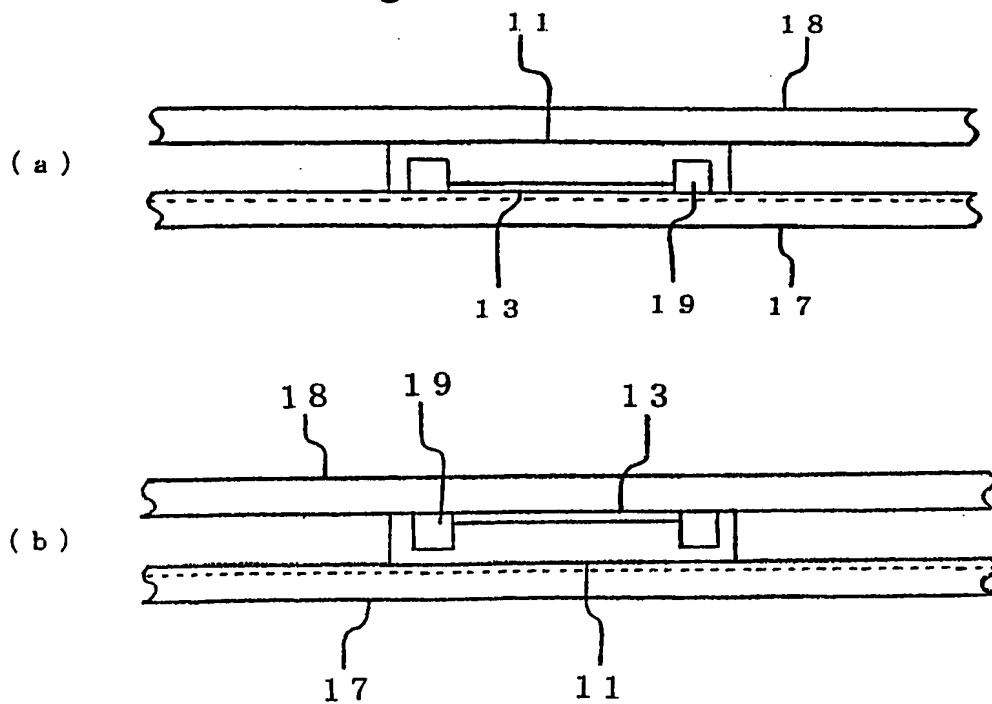


Fig.16



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Fig.17

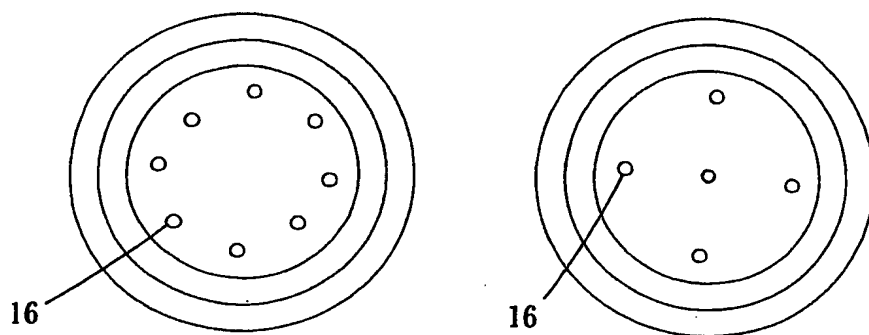


Fig.18

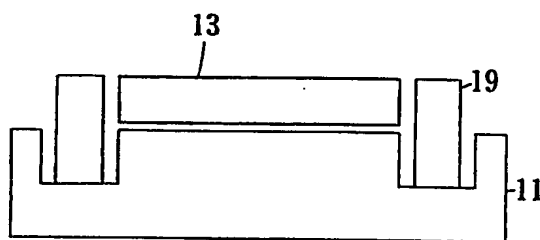
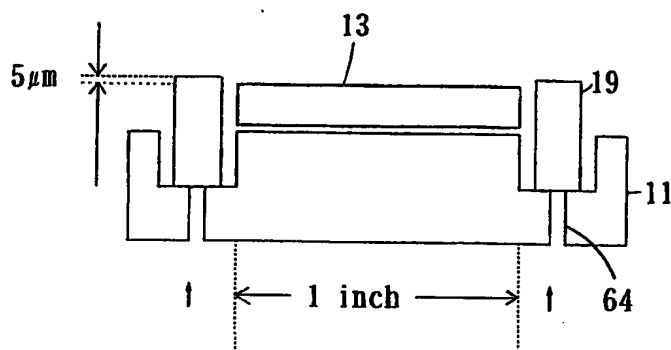


Fig.19



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Fig.20

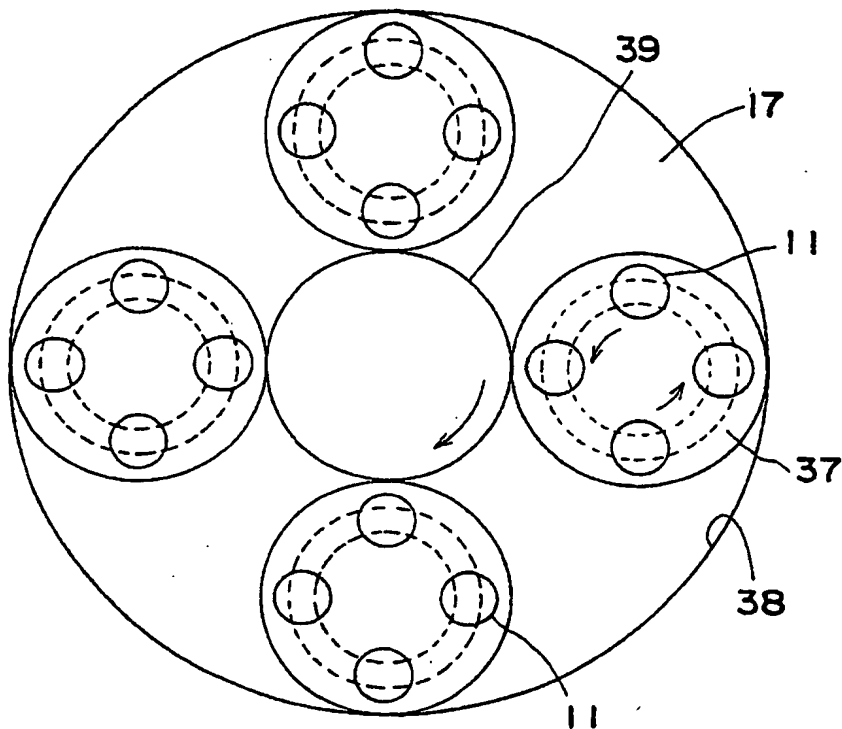


Fig.21

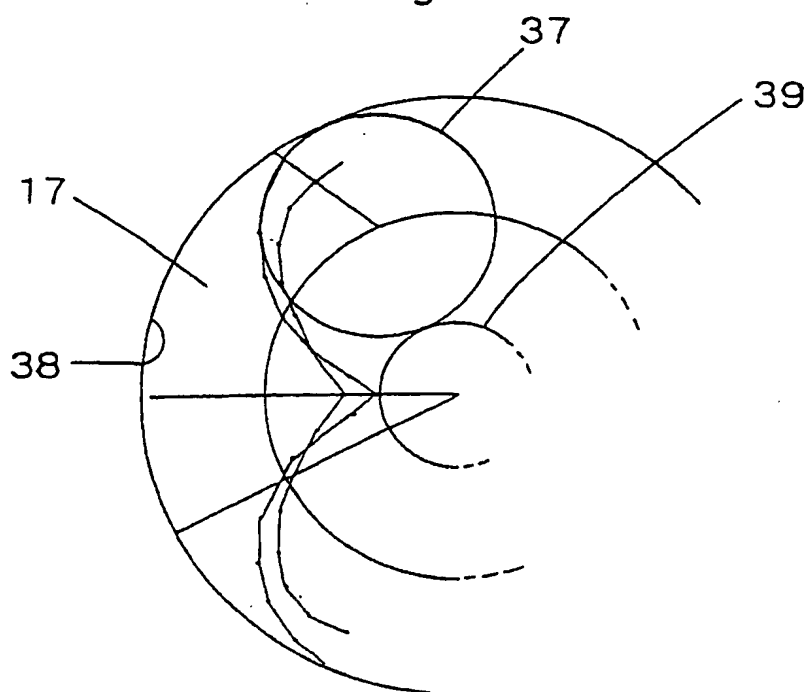
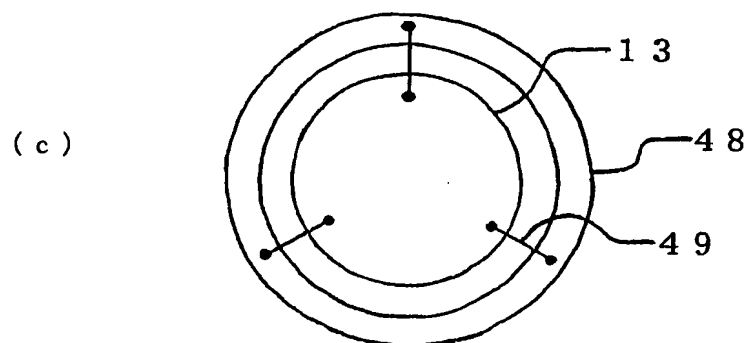
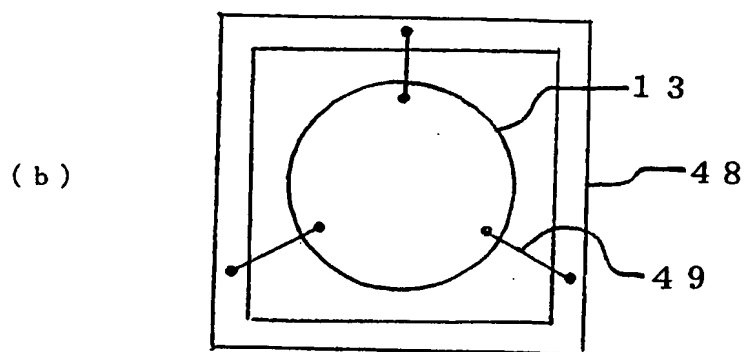
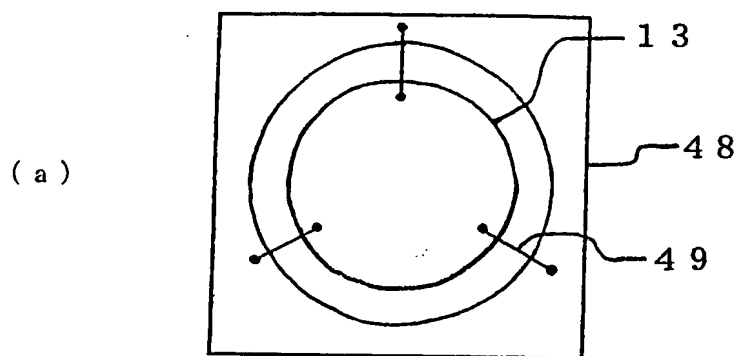


Fig. 20

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Fig.22



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Fig. 23

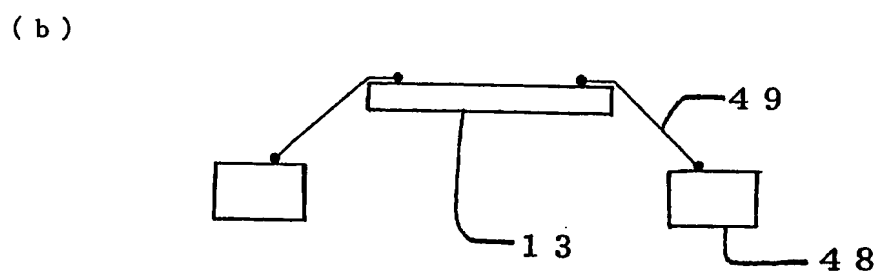
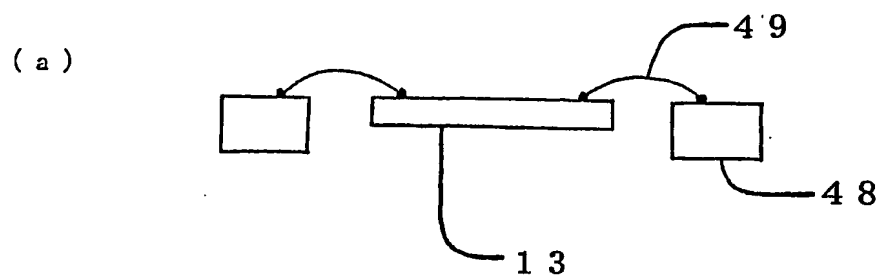
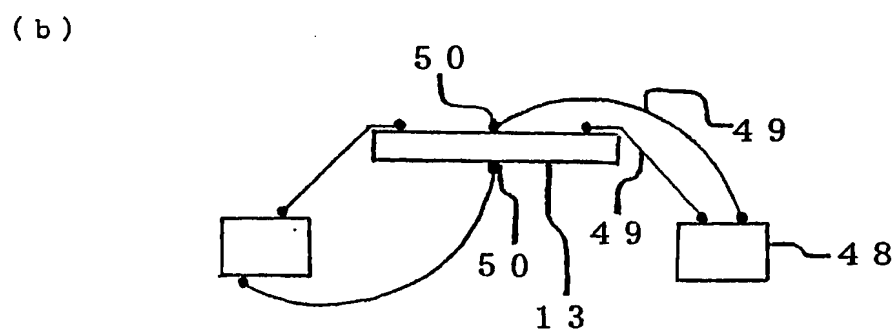
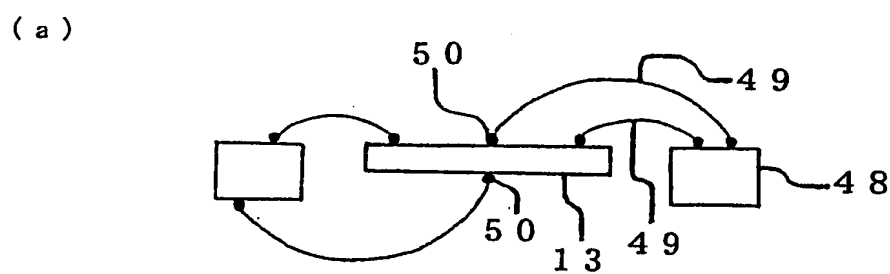


Fig. 24



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Fig.25

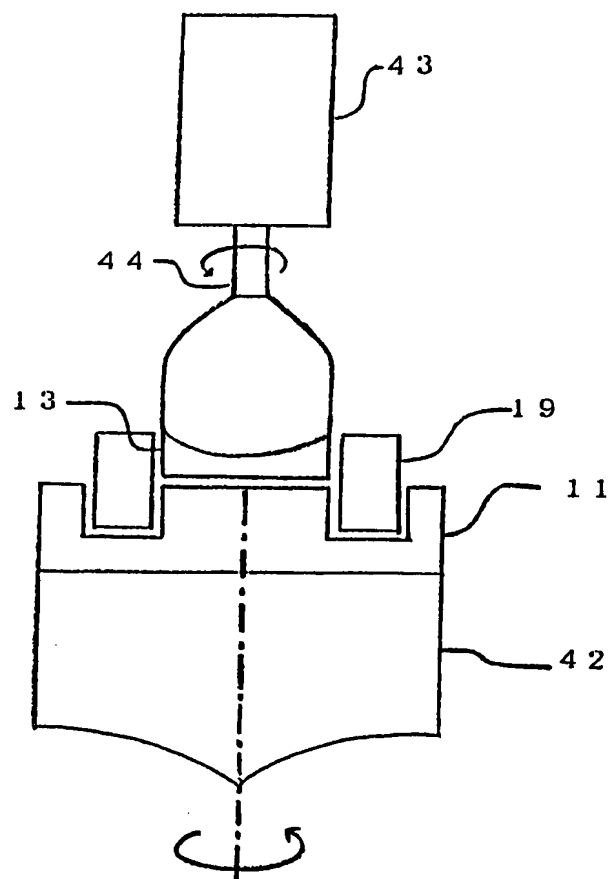
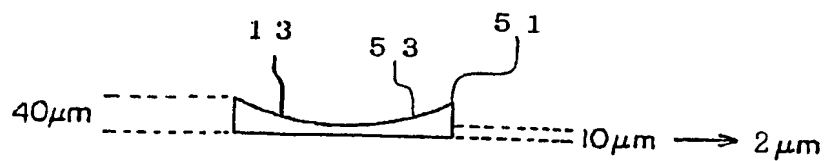


Fig.26



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Fig.27

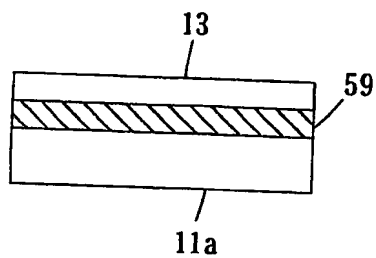


Fig.28

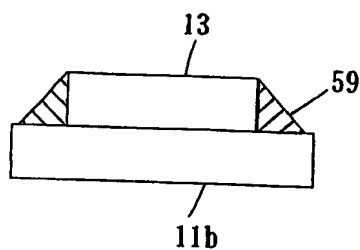
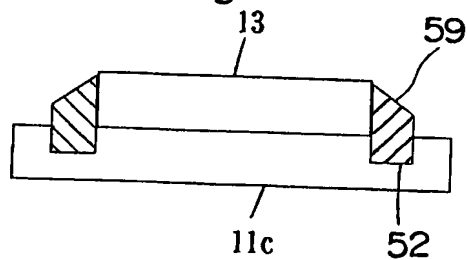
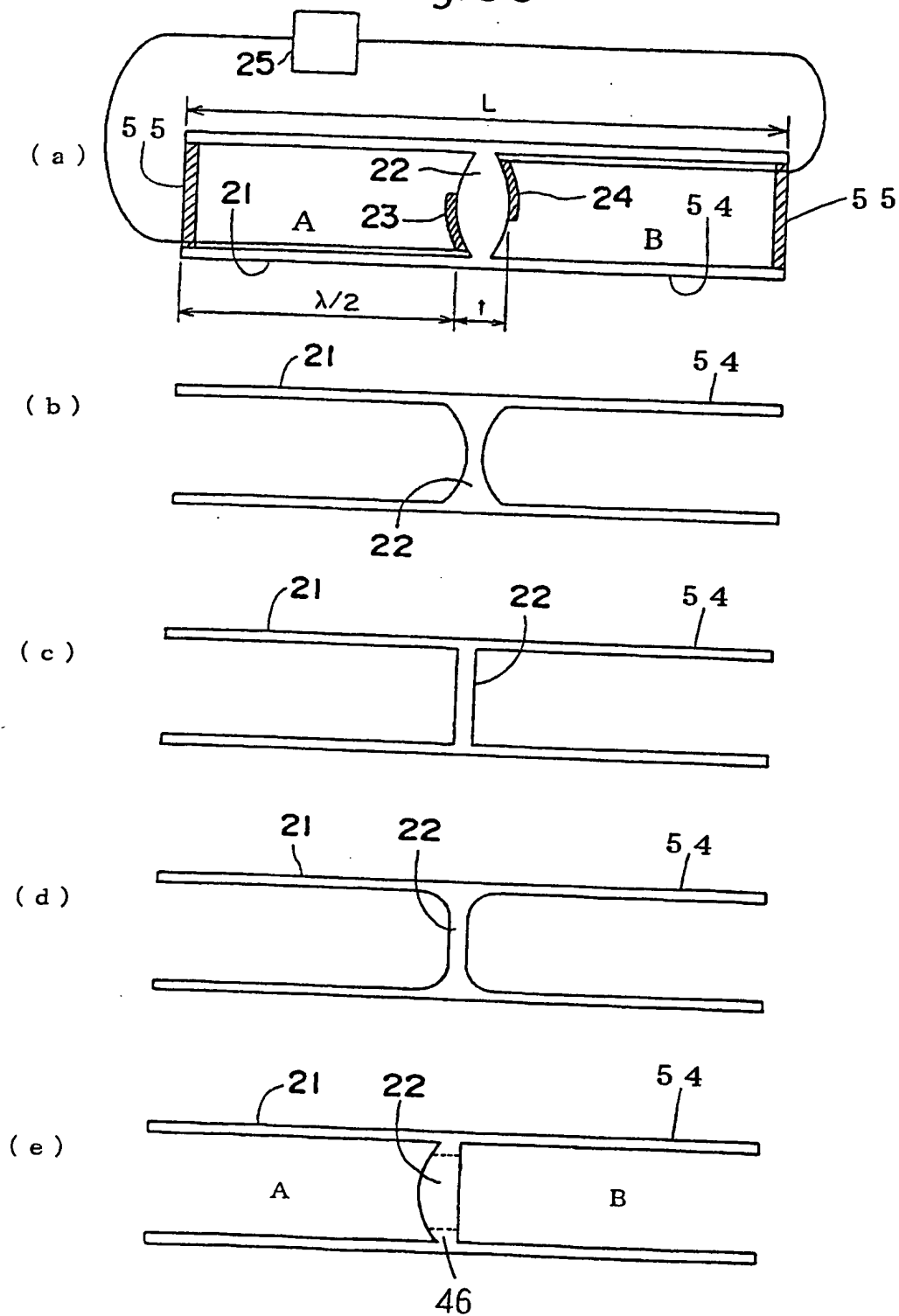


Fig. 29



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Fig.30



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Fig.31

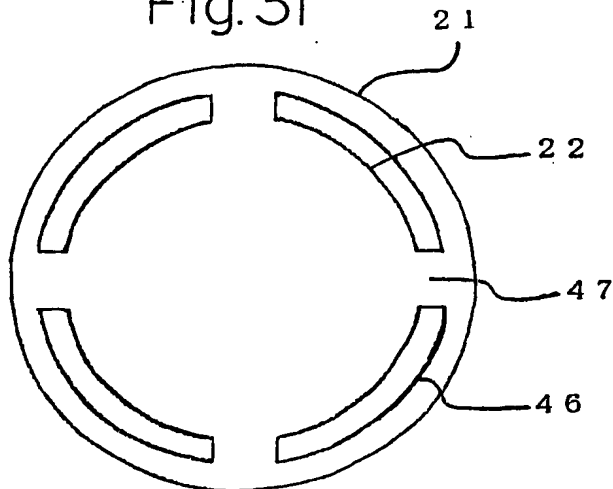


Fig.32

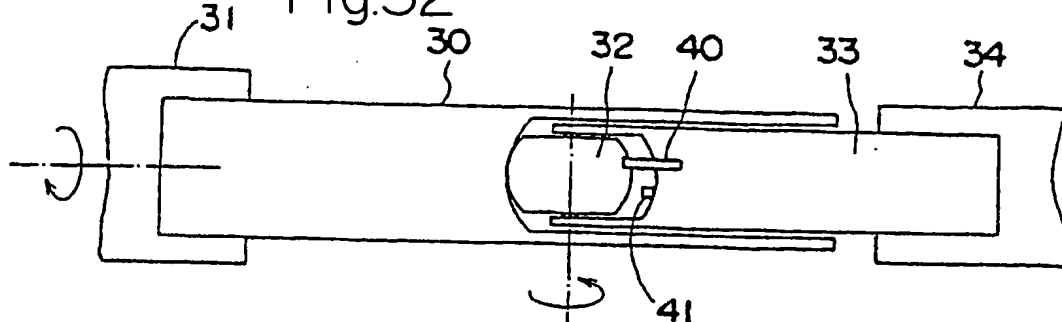


Fig.33

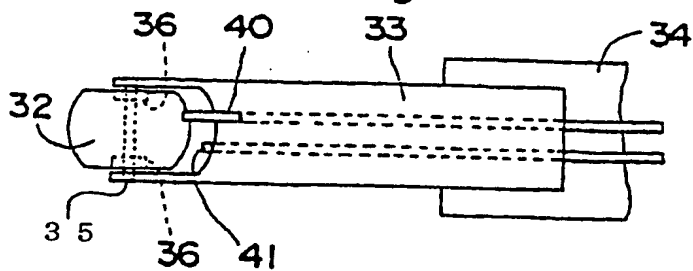
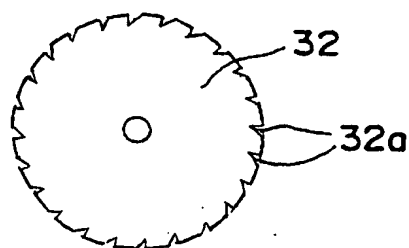
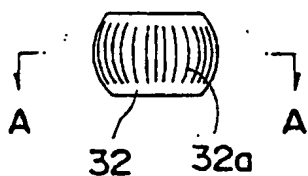


Fig.34

(a)

(b)



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Fig.35

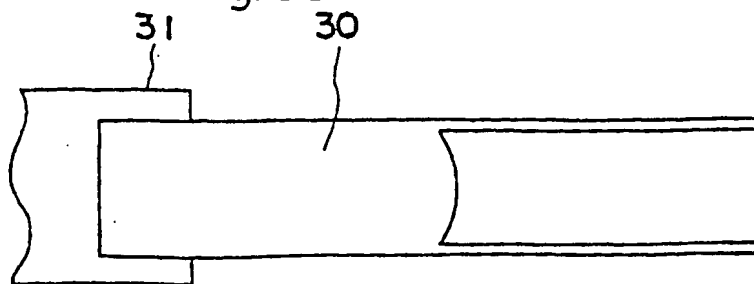
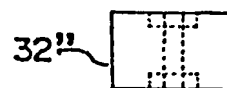
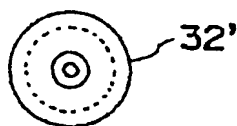
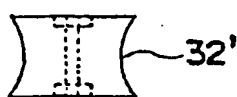


Fig.36

(a)

(b)

(c)



(d)

(e)

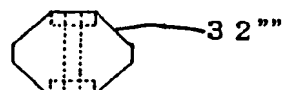
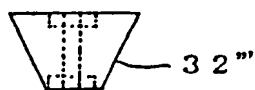
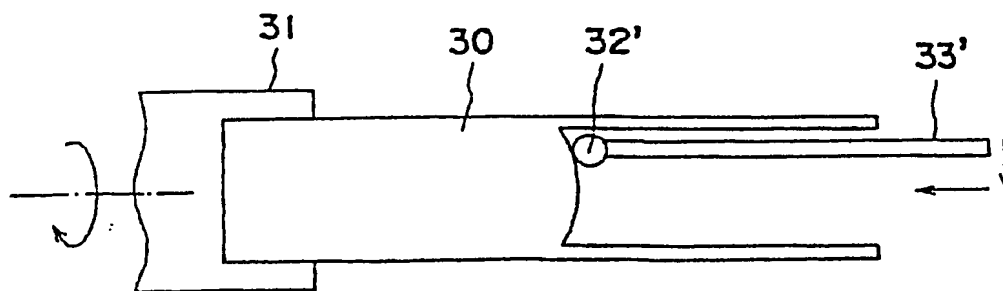


Fig.37



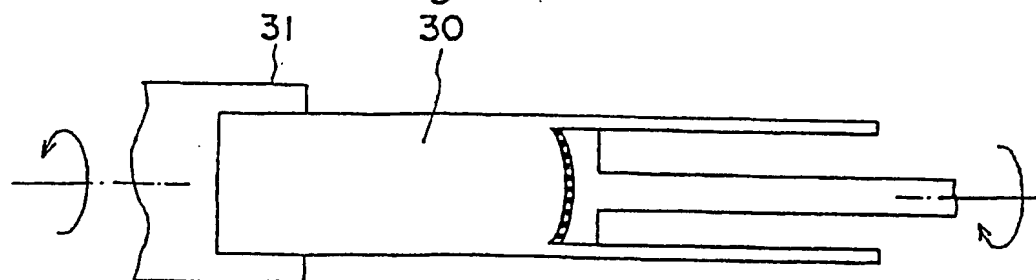
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Fig.38

Fig.39

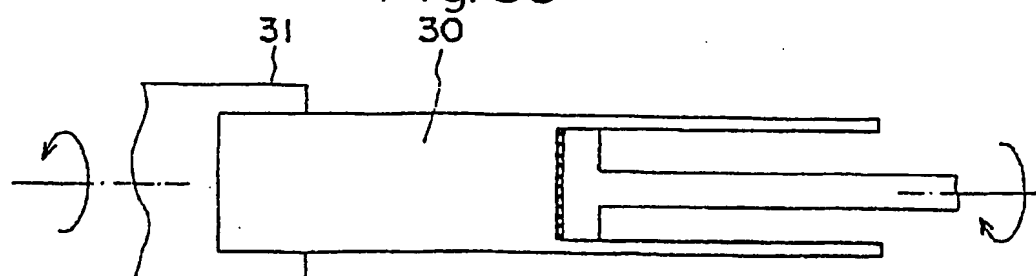
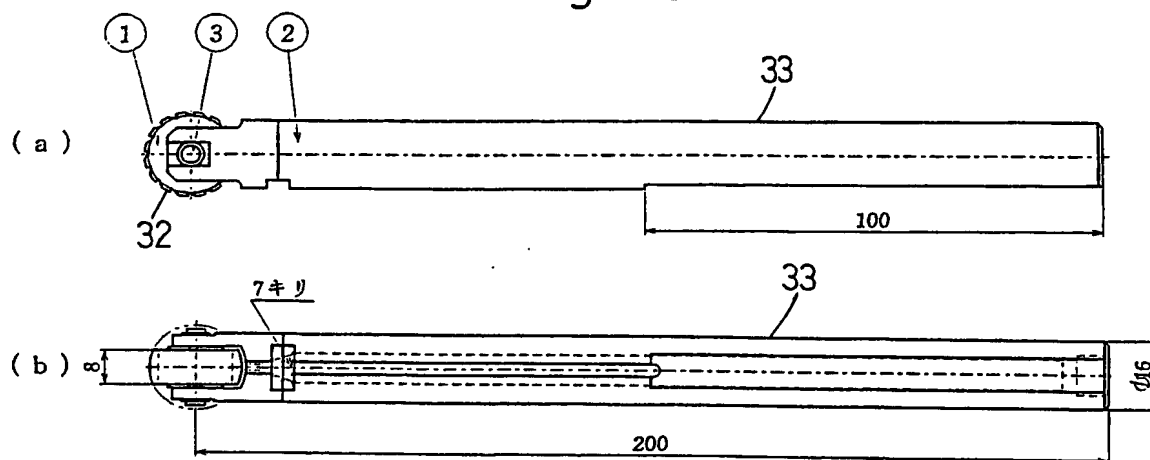


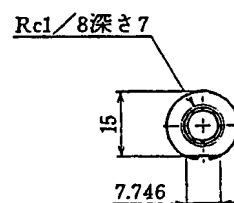
Fig.40



(c)

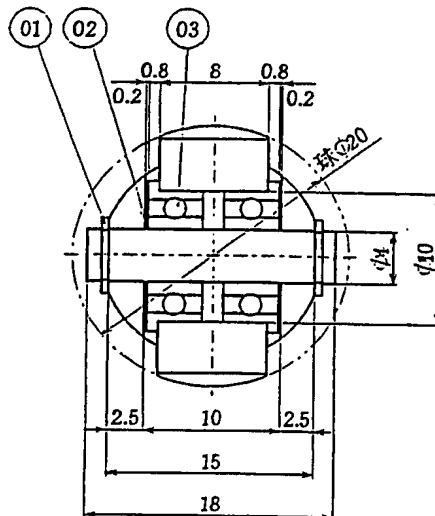


(d)

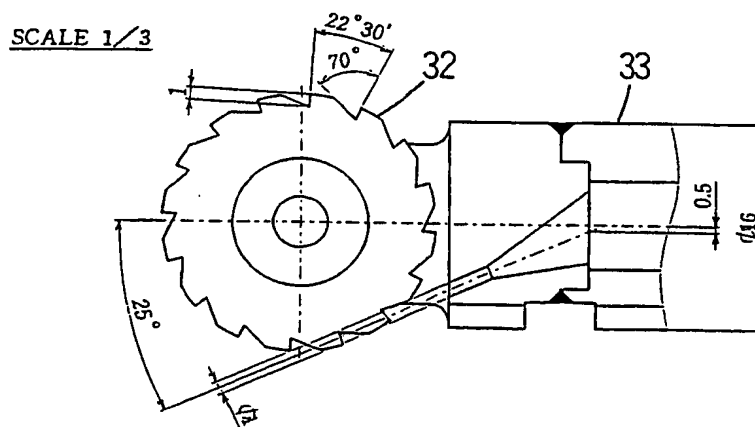


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Fig.41

(a)

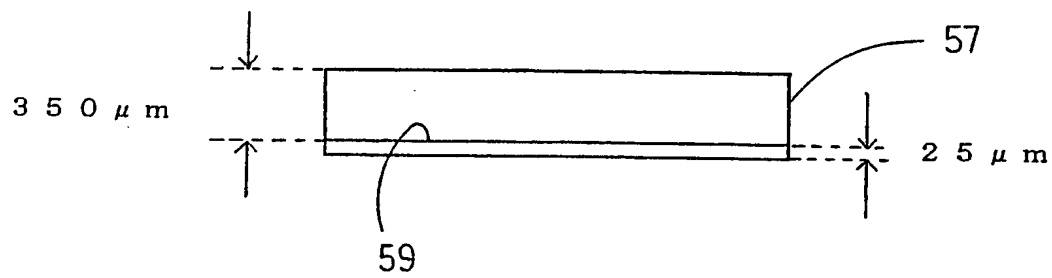


(b)

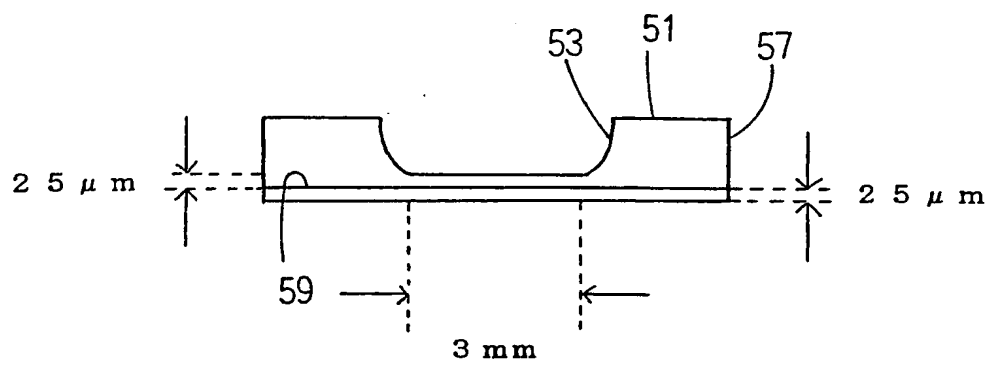


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Fig.42

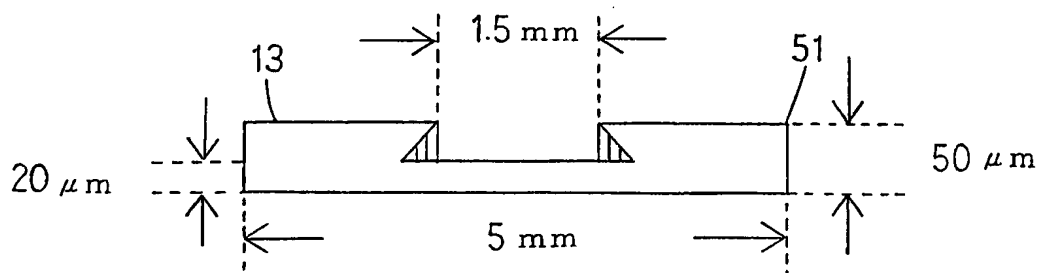
(a)



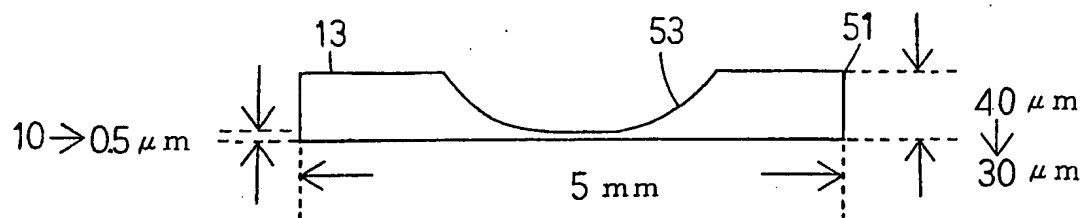
(b)

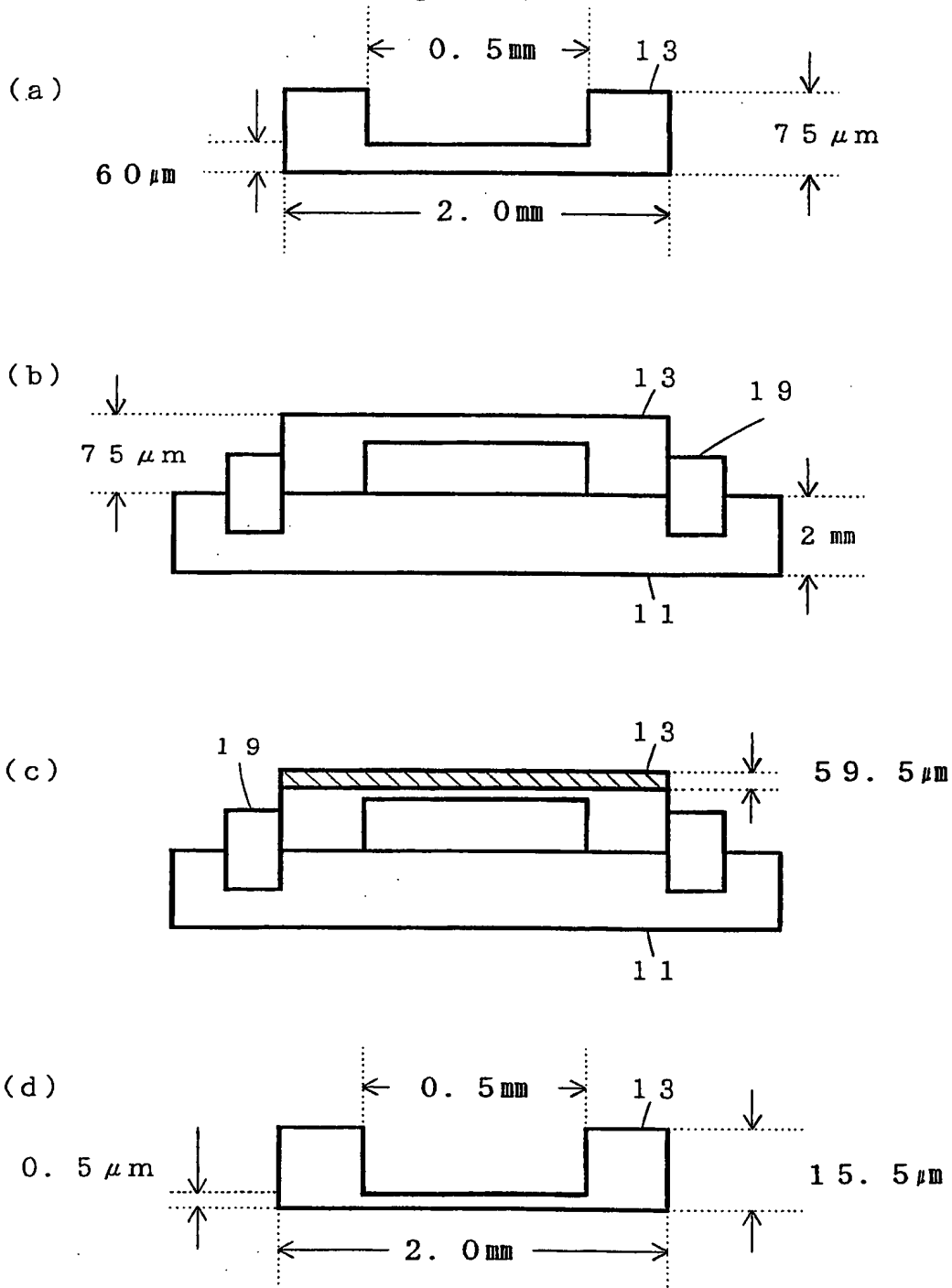


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Fig. 43
(a)

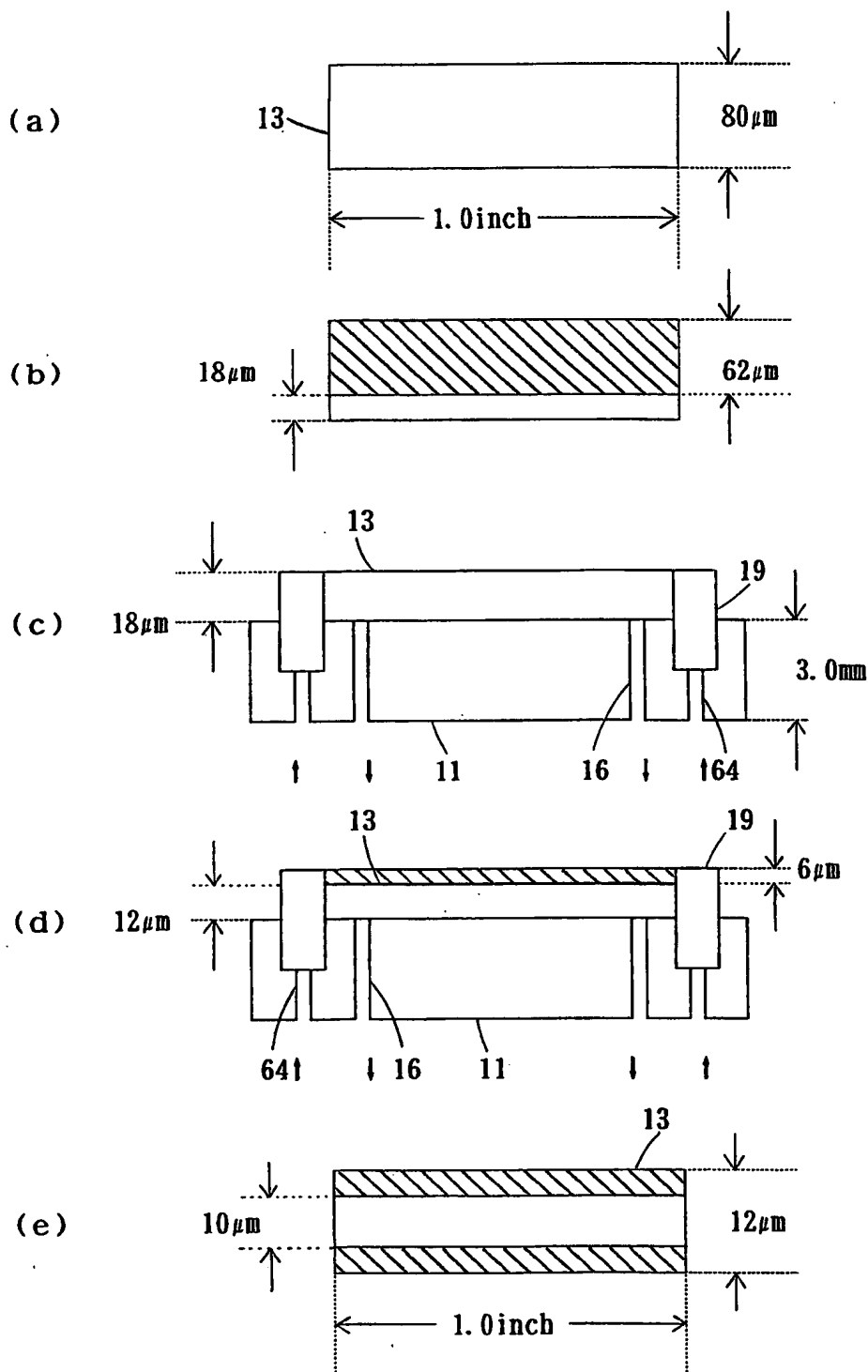


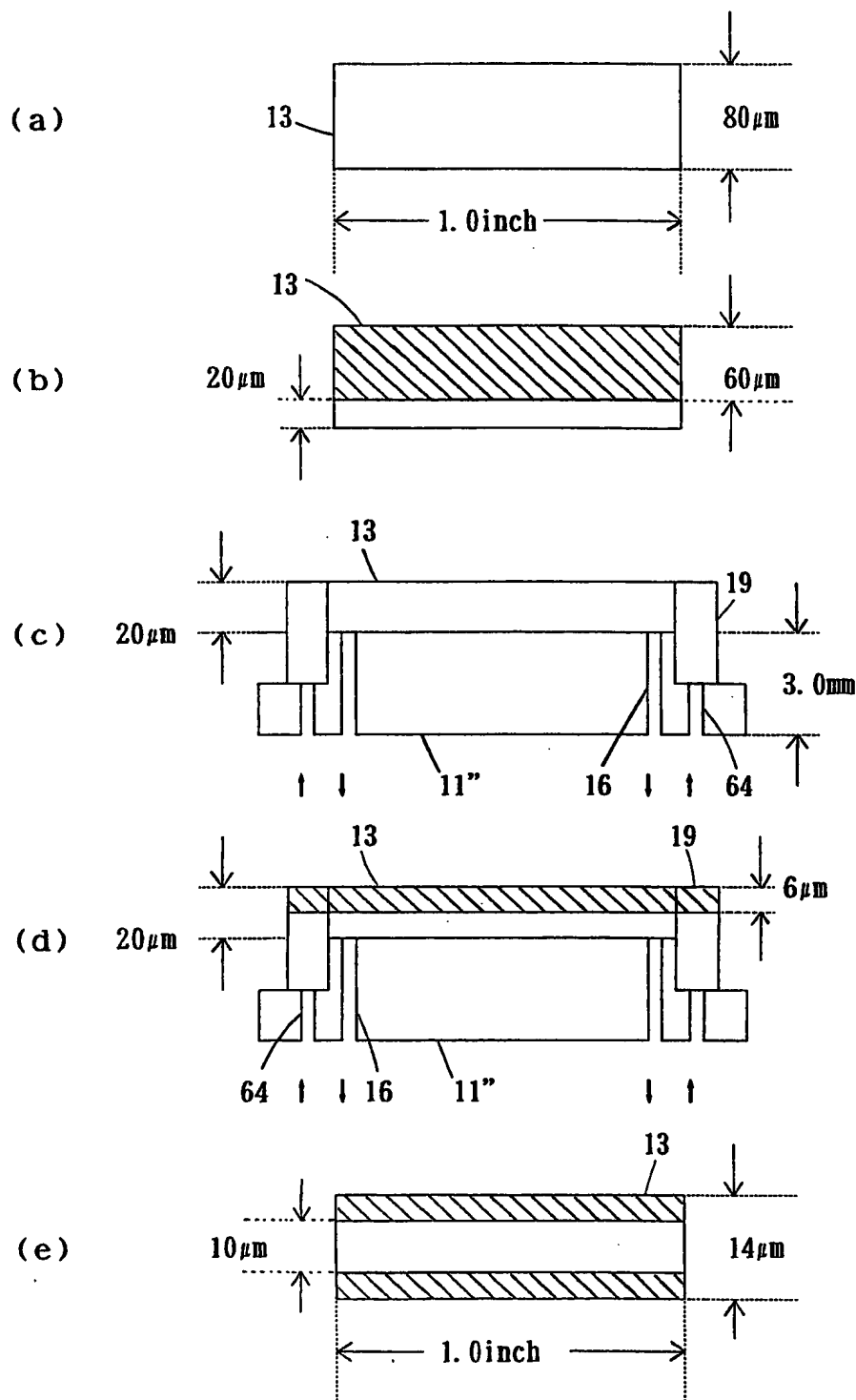
(b)



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Fig. 44

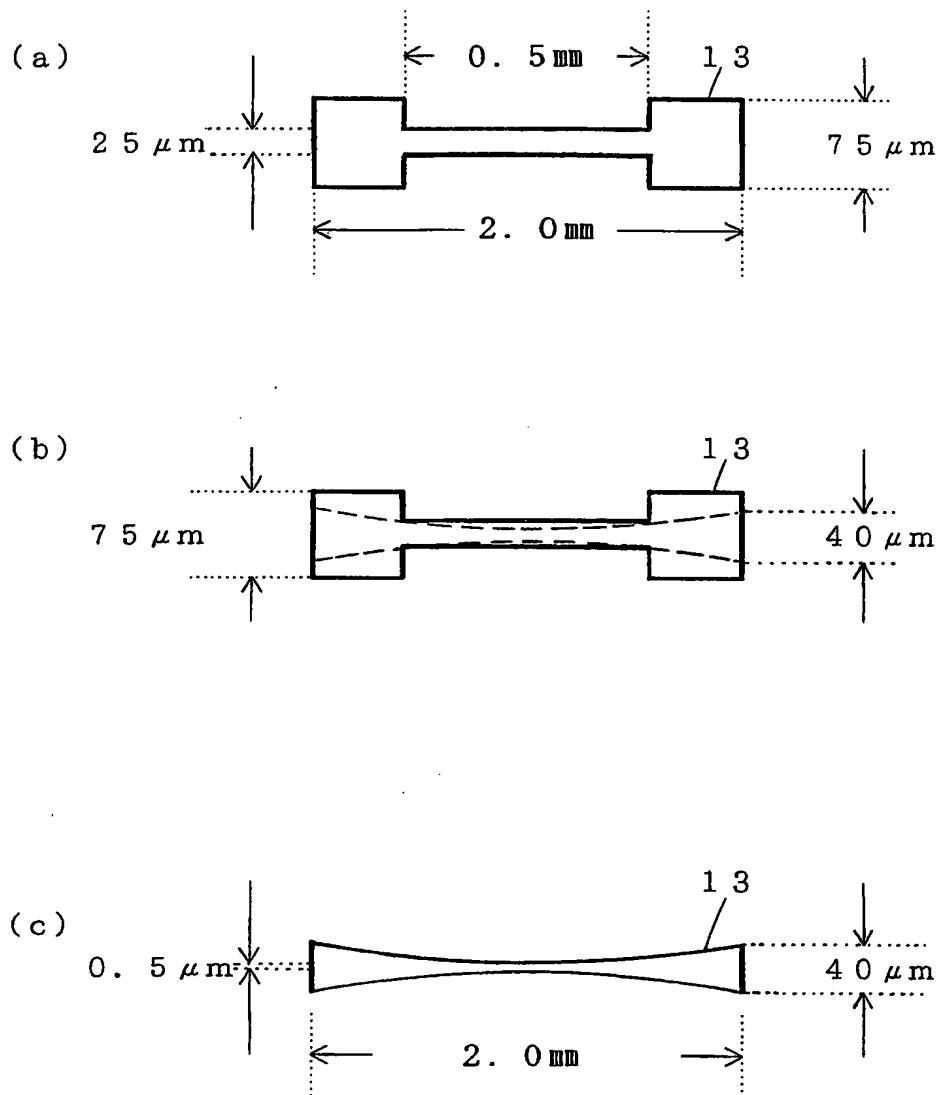
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Fig. 45



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Fig.46

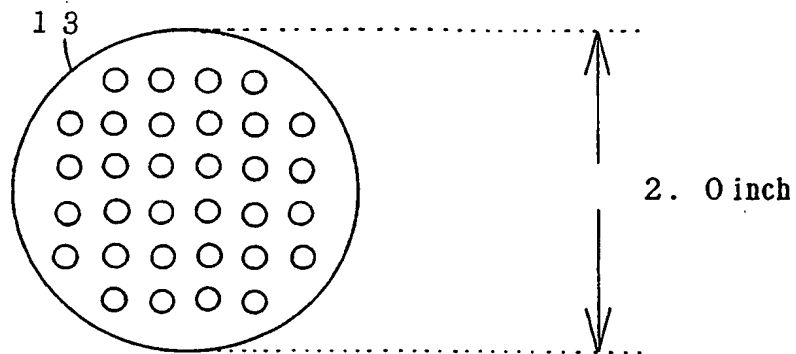
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Fig.47

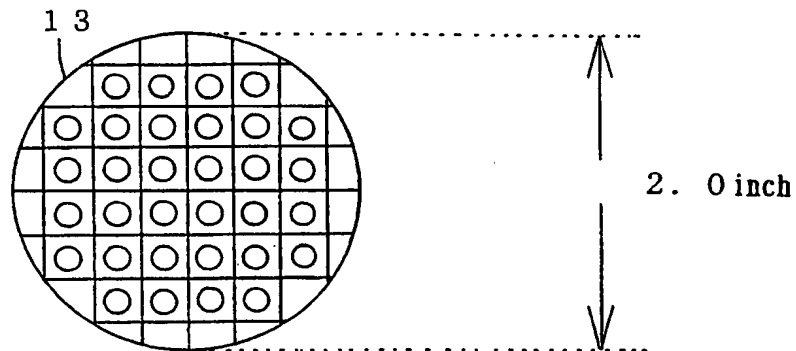


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Fig. 48

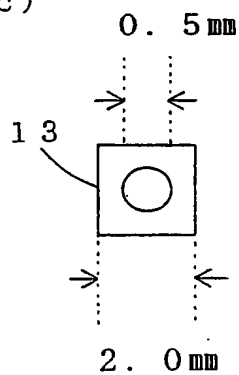
(a)



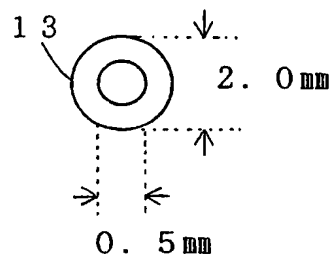
(b)



(c)

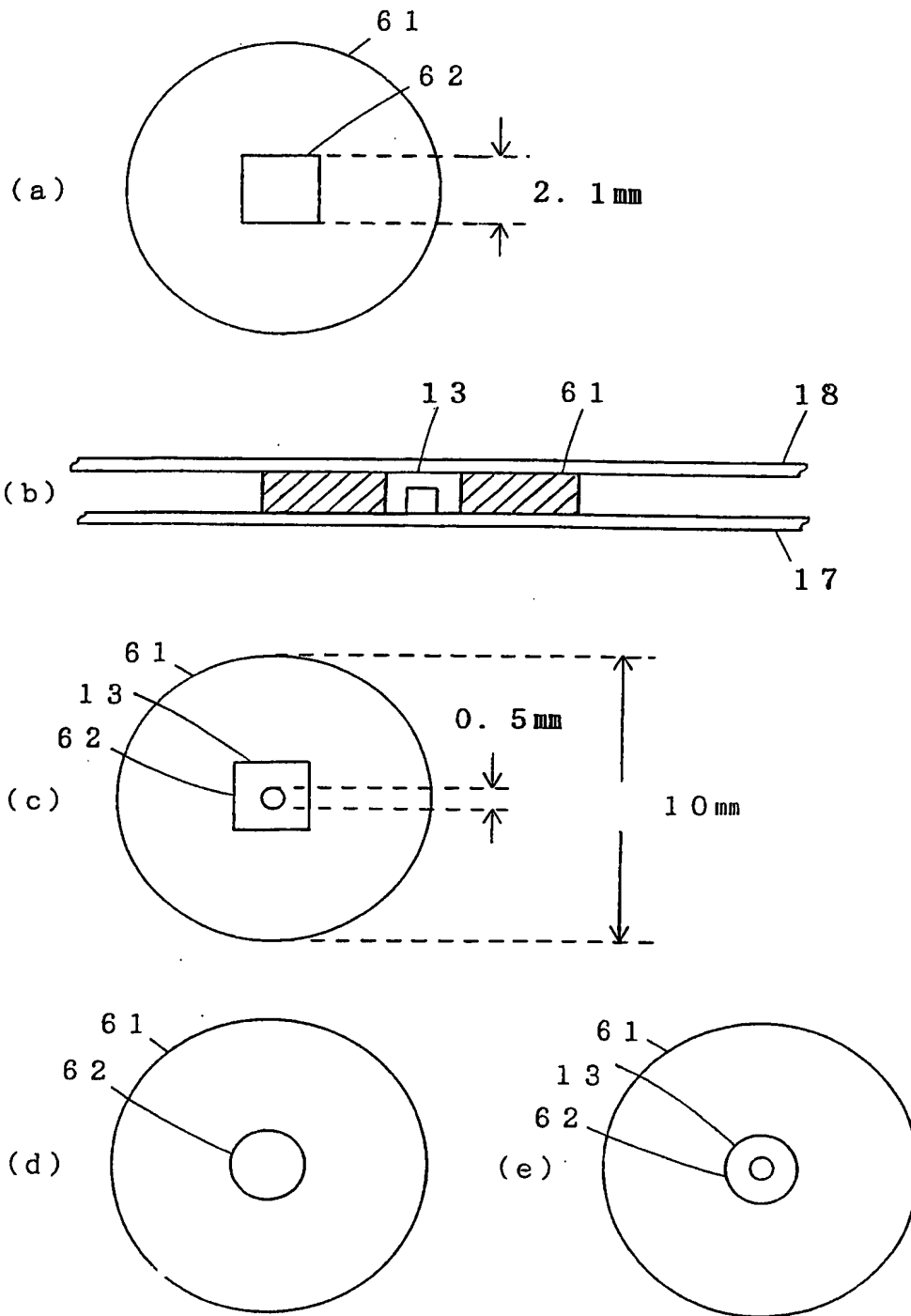


(d)



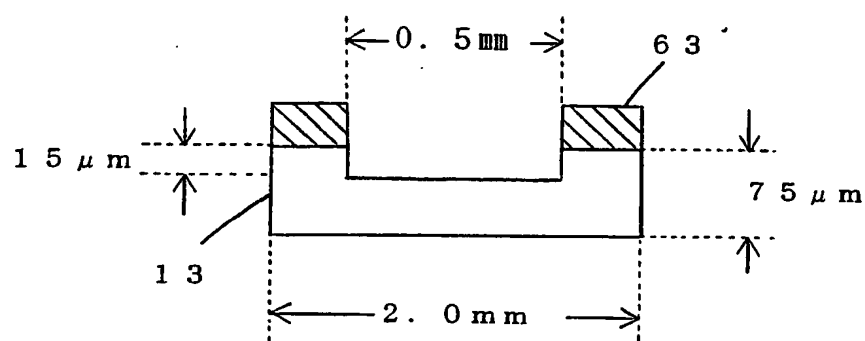
526675-0001

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Fig.49



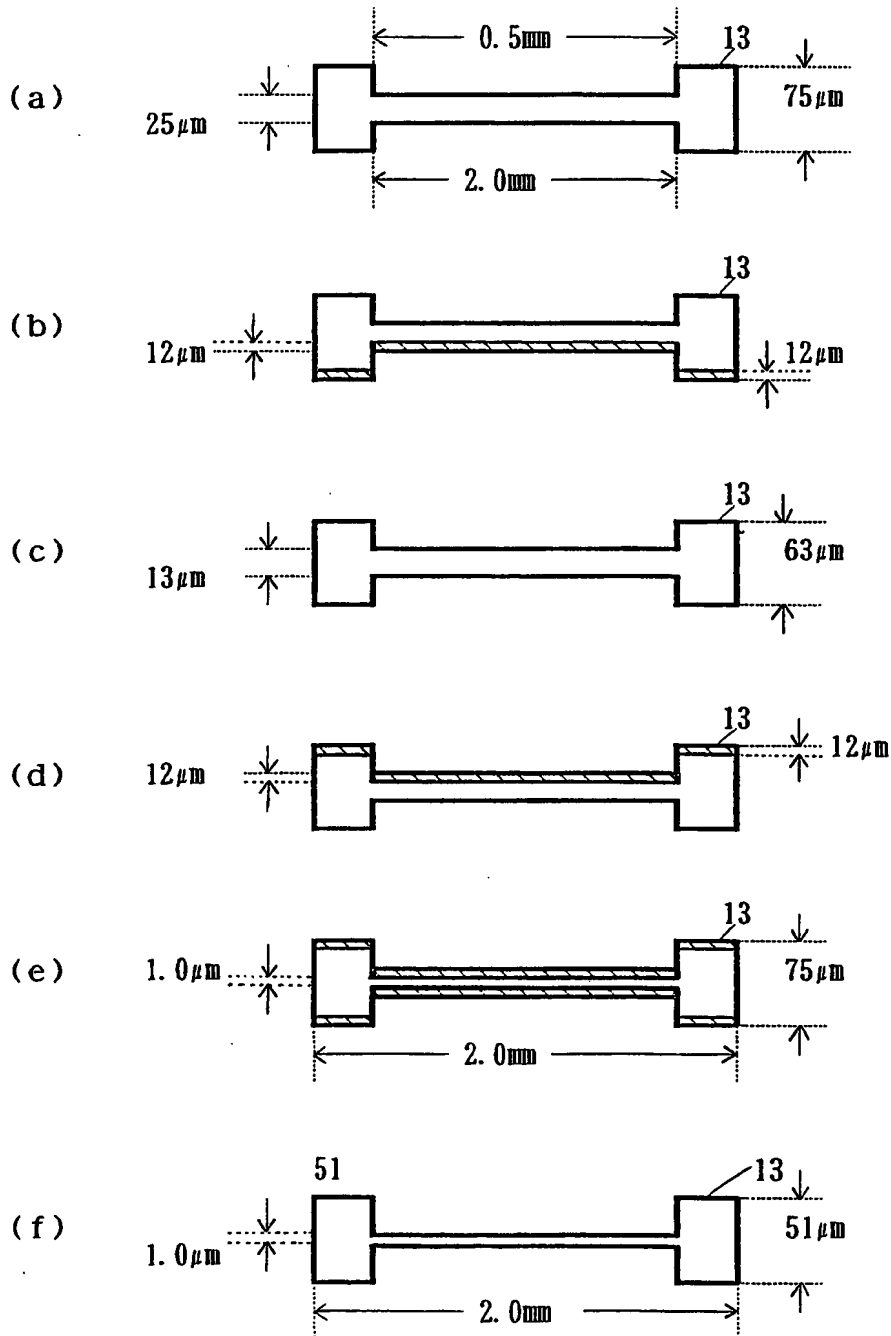
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Fig.50



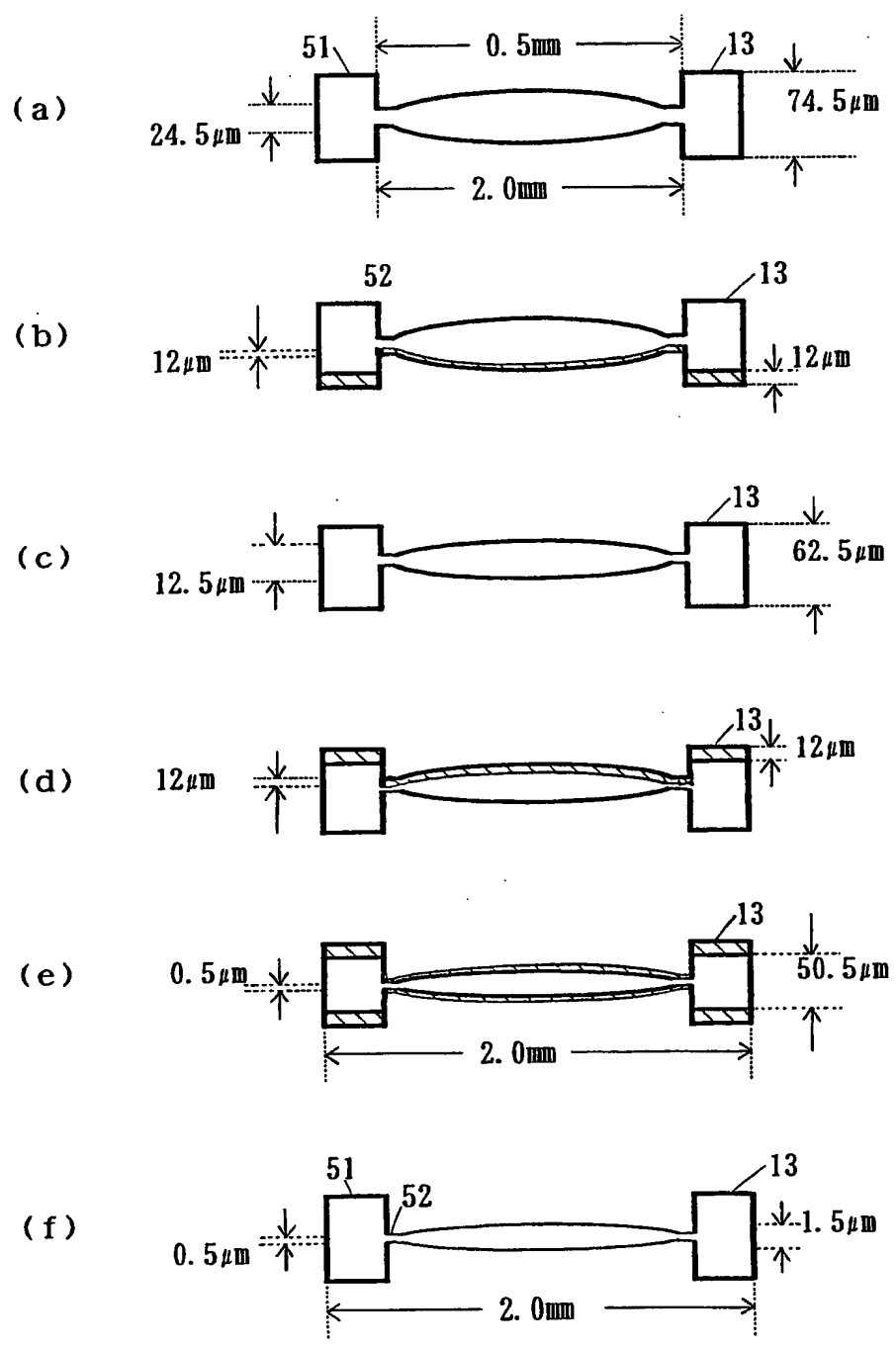
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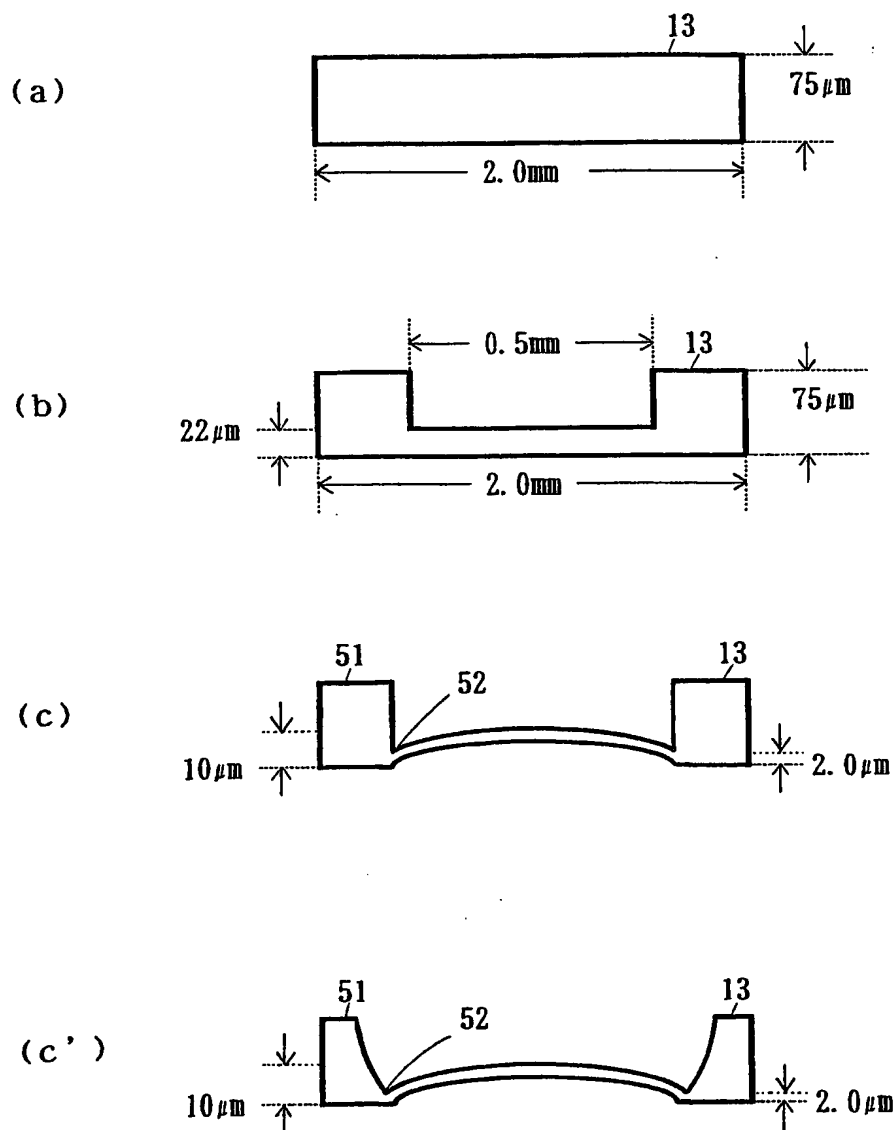
Fig. 51



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Fig.52

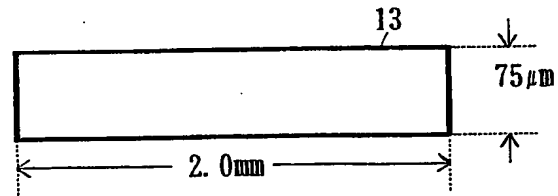




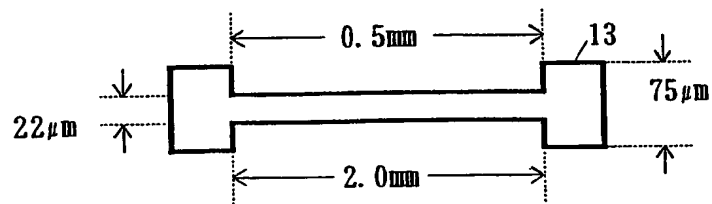
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Fig. 54

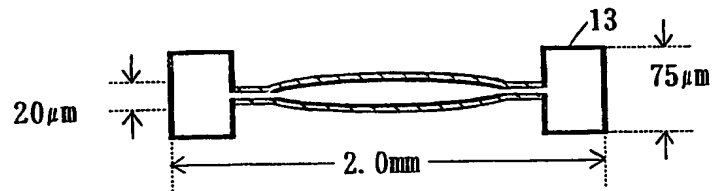
(a)



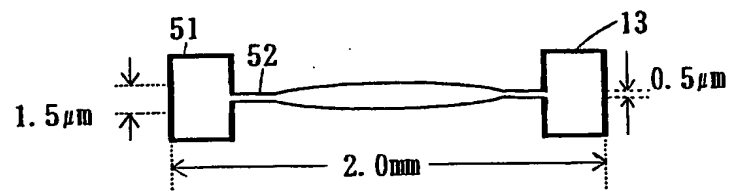
(b)



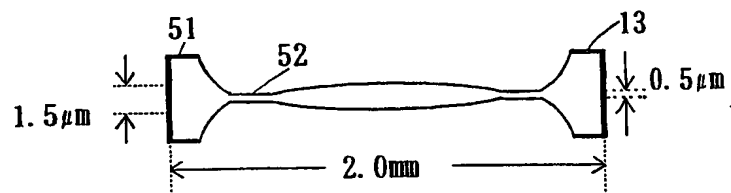
(c)



(d)

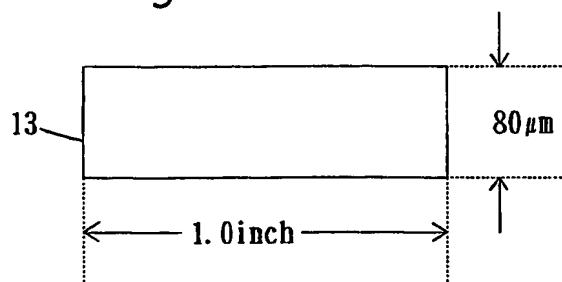


(d')

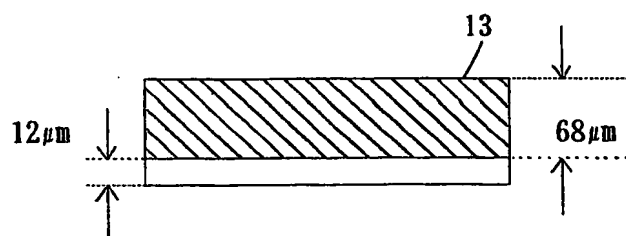


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Fig. 55

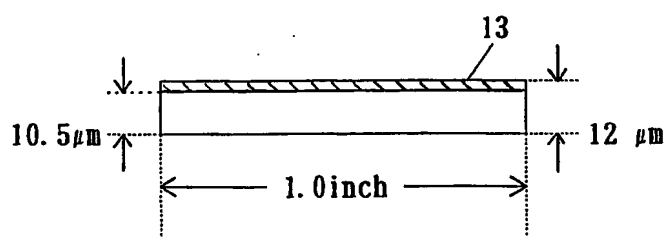
(a)



(b)

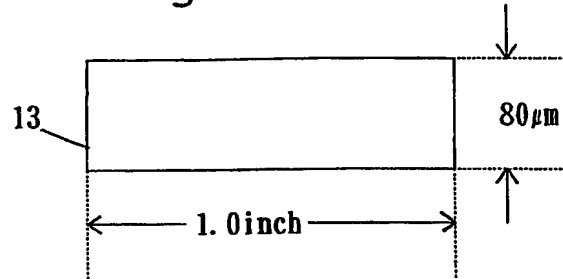


(c)

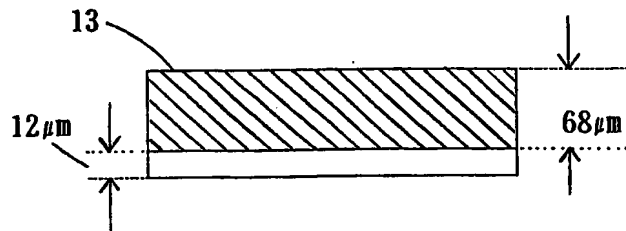


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Fig.56

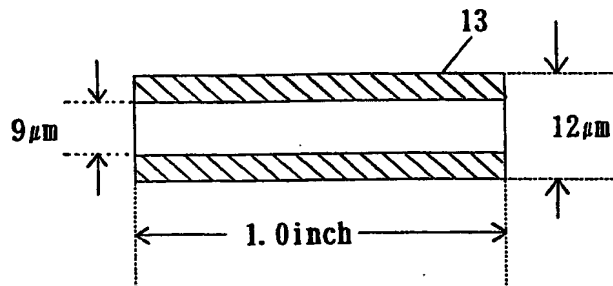
(a)



(b)

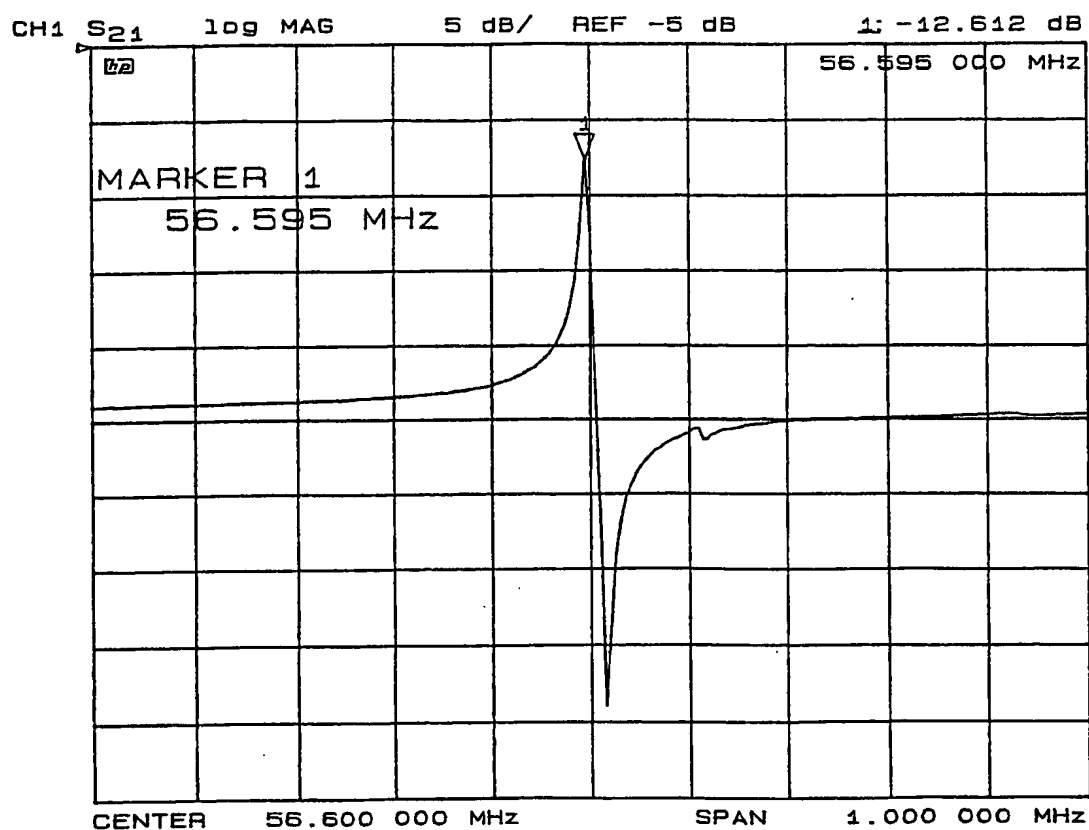


(c)



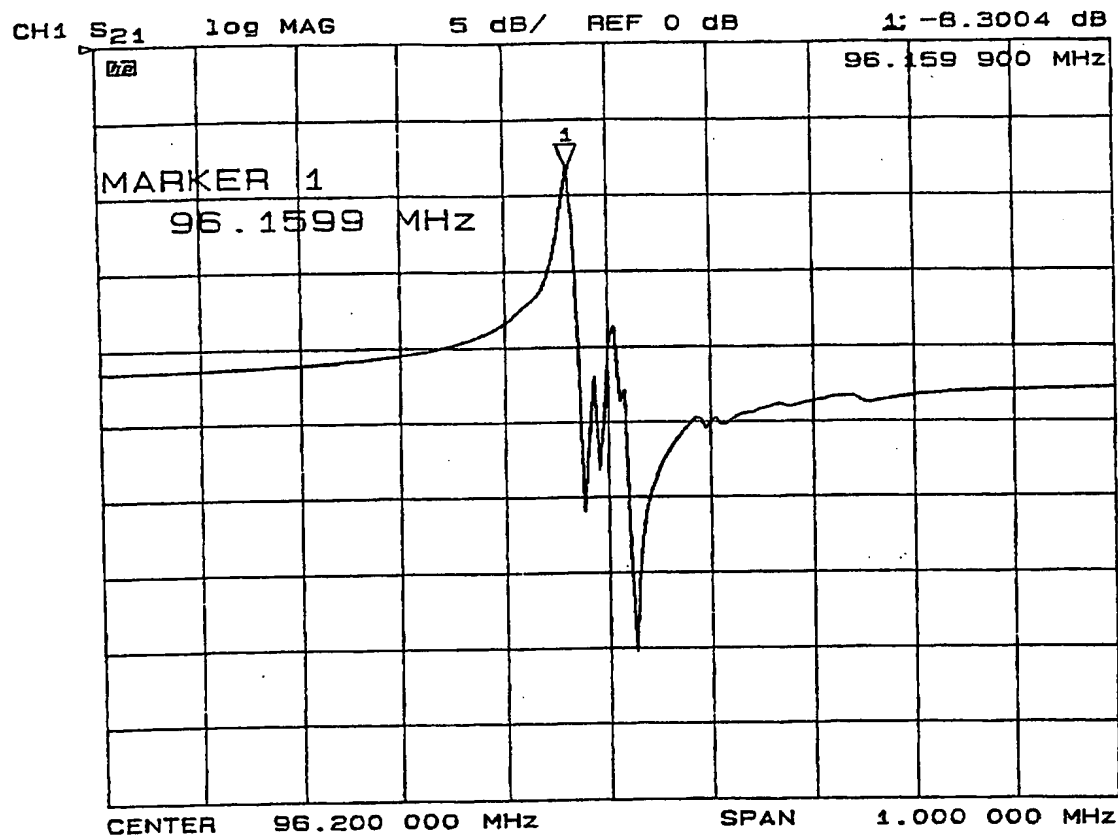
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Fig.57



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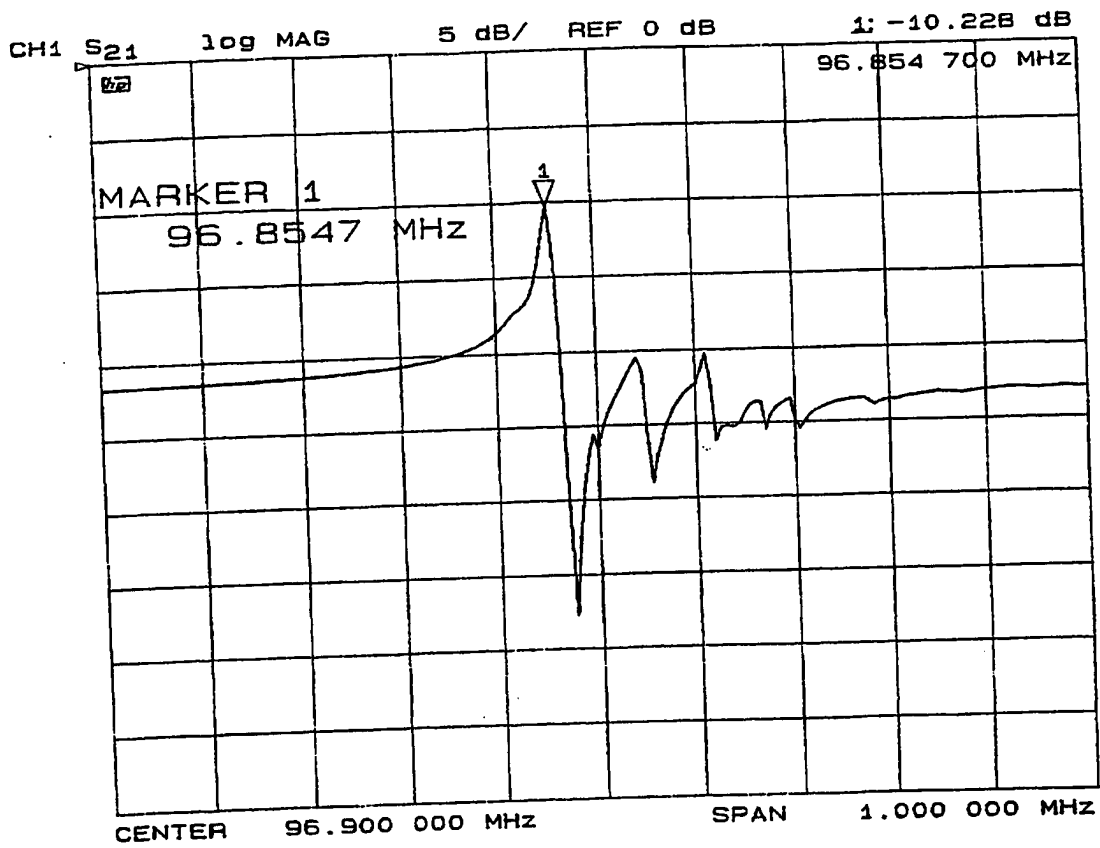
Fig. 58



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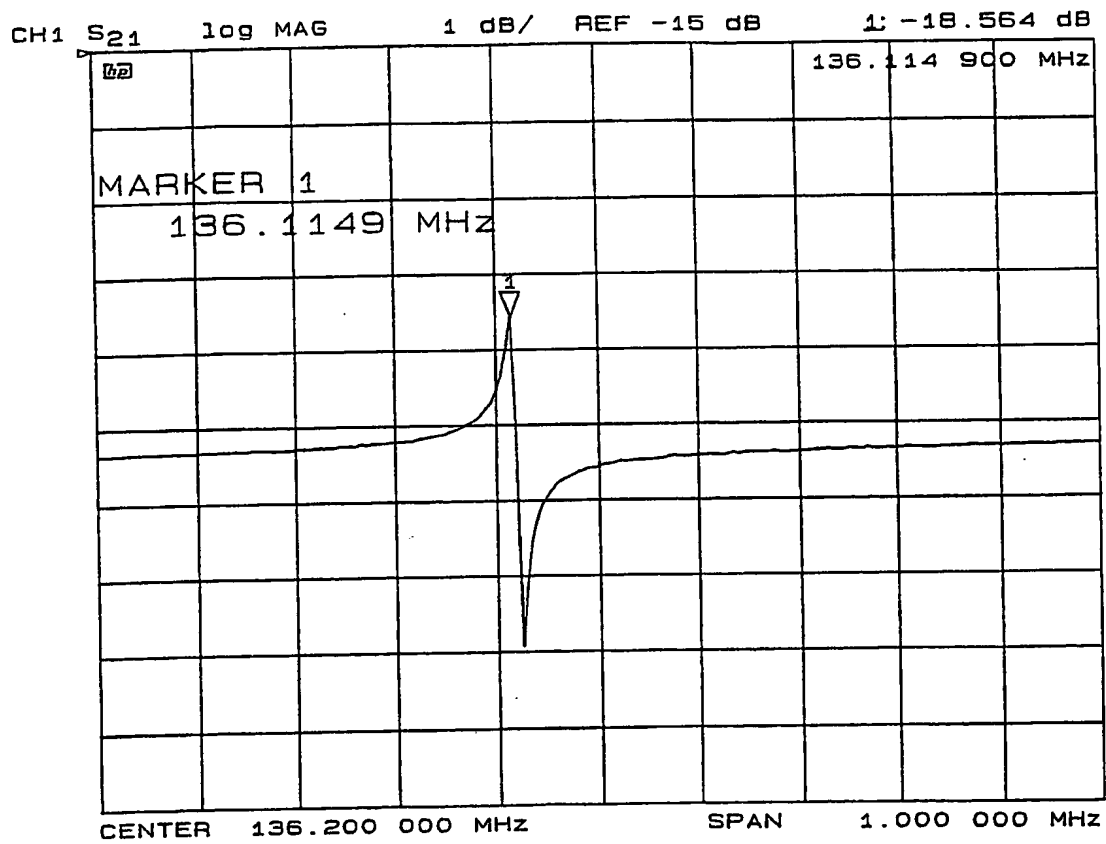
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Fig.59



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Fig.60

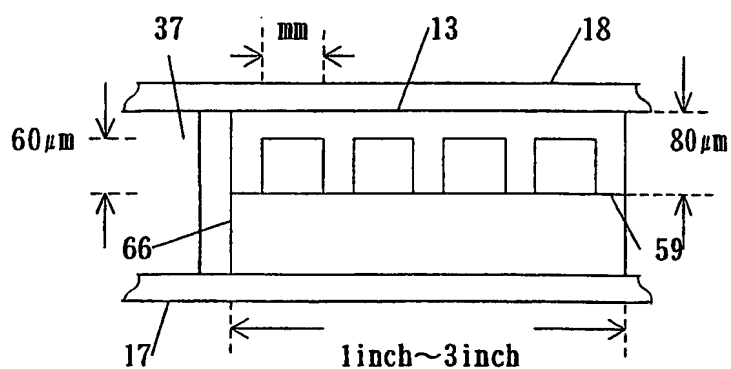


136.1149 MHz

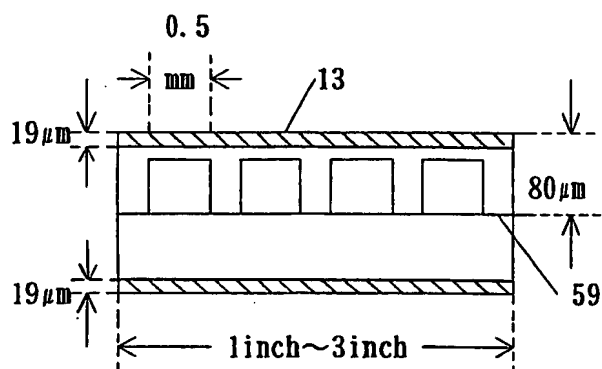
42/82
Fig. 61

0.5

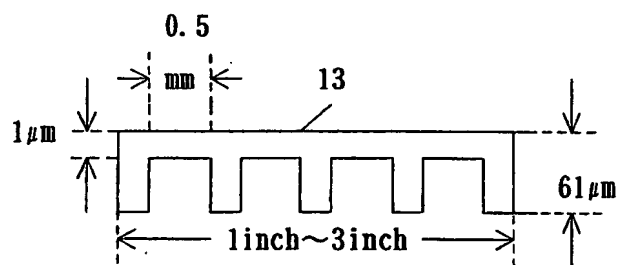
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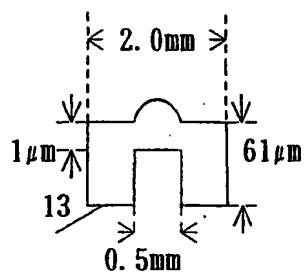
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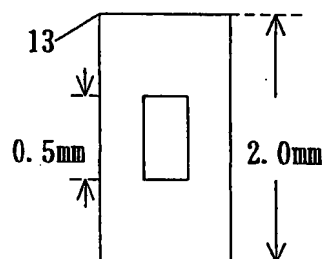
(c)



(d)

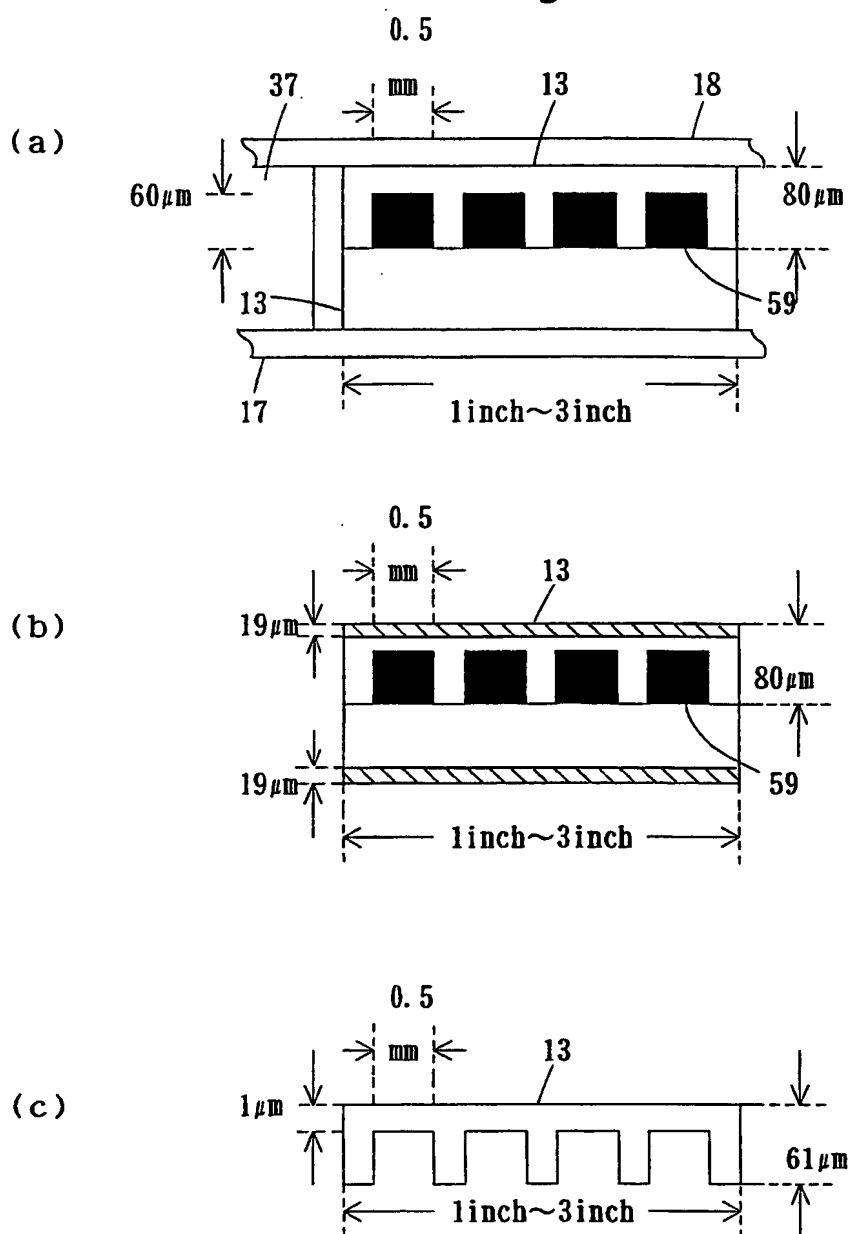


(e)



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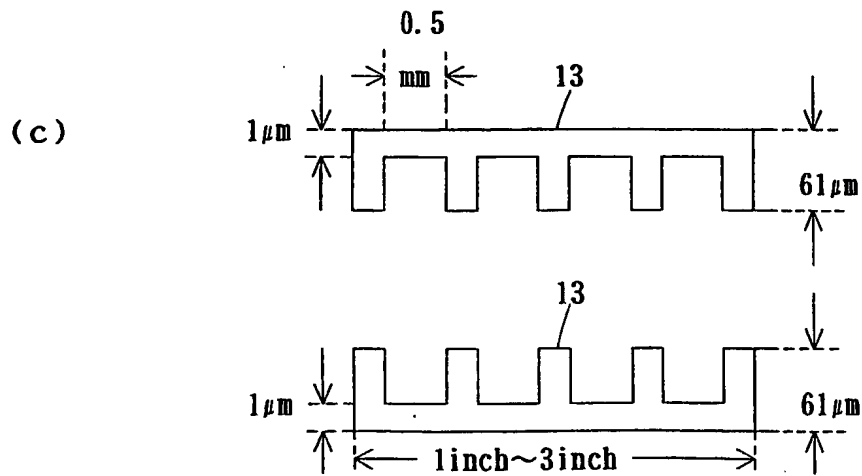
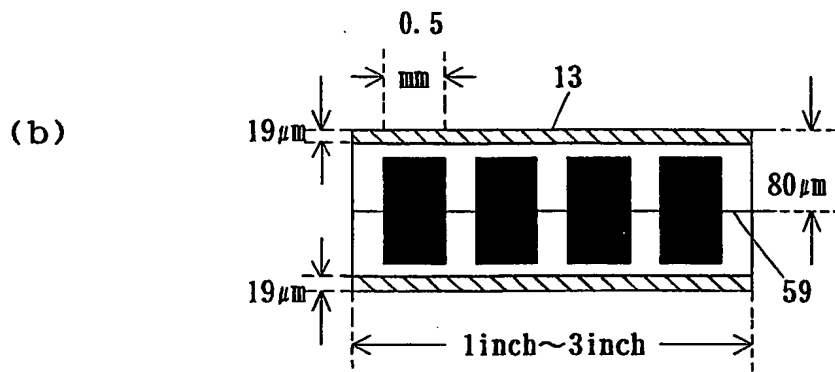
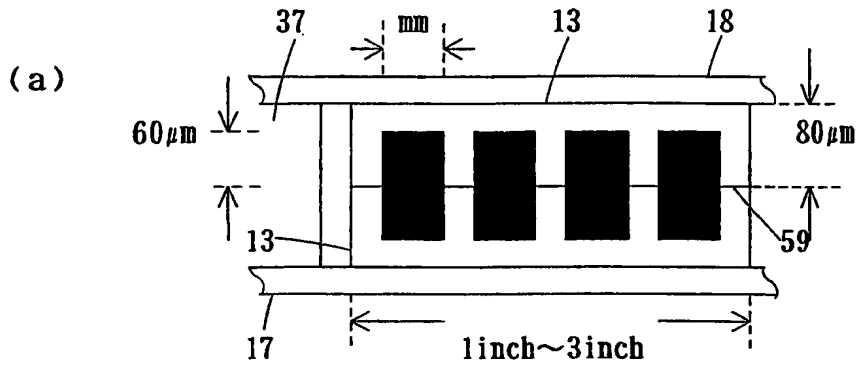
Fig. 62



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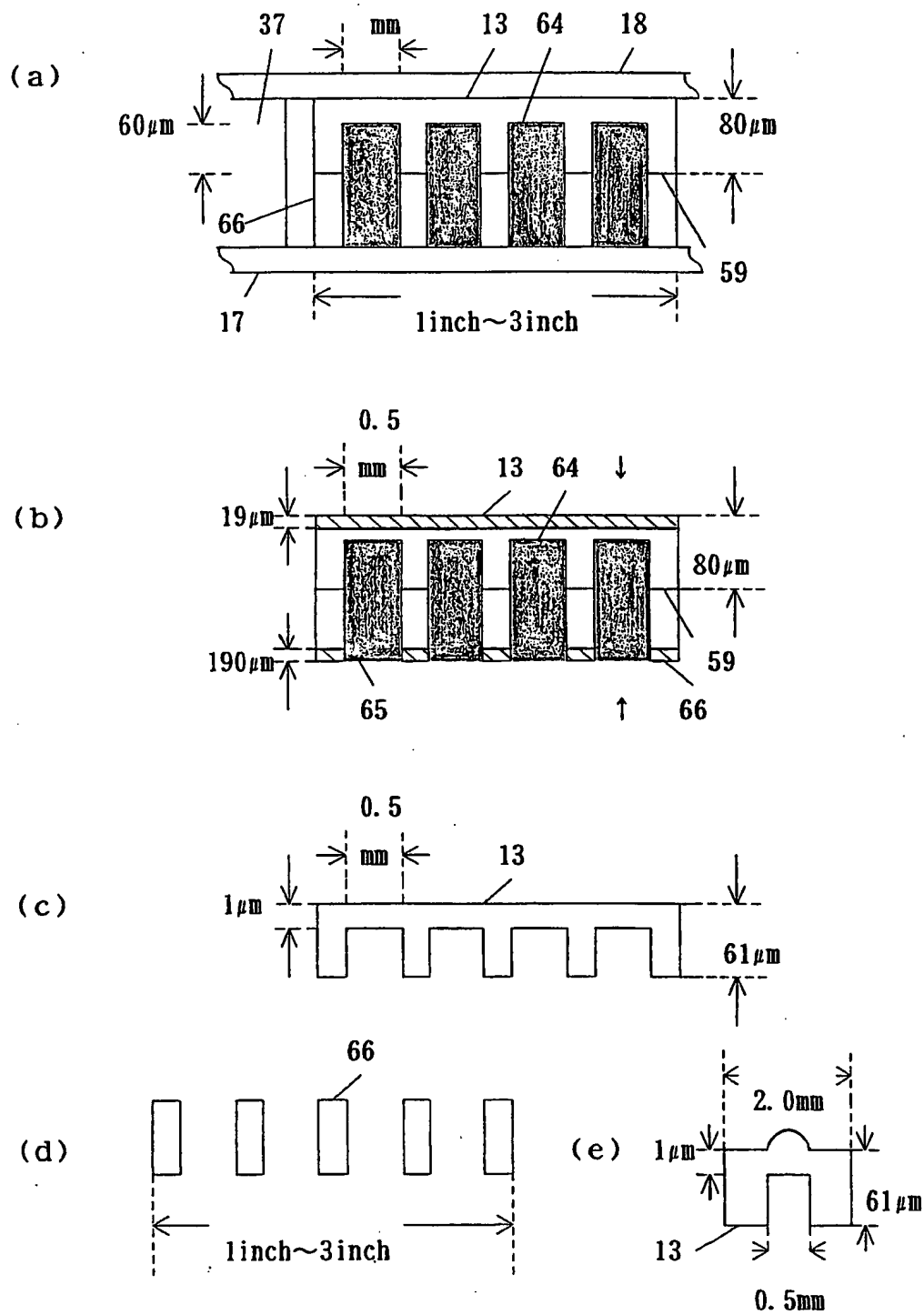
Fig.63

0.5



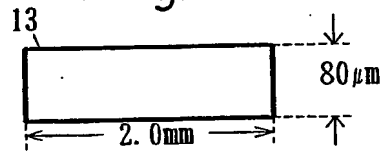
09/914975-16564

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Fig. 64
0.5

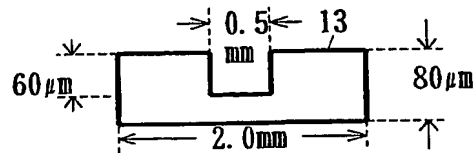


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Fig.65

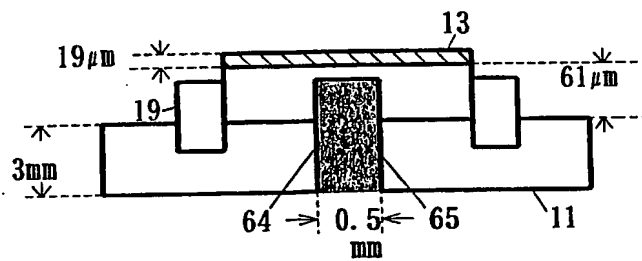
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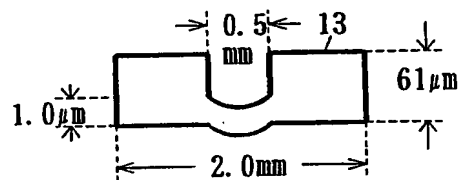
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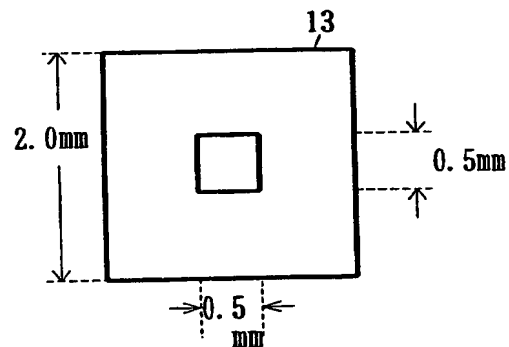
(c)



(d)

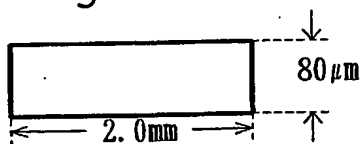


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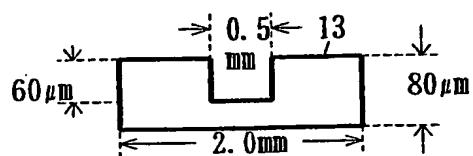


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Fig.66

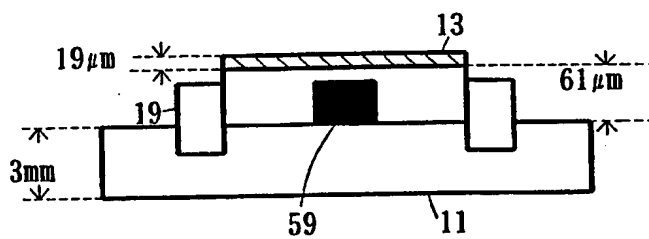
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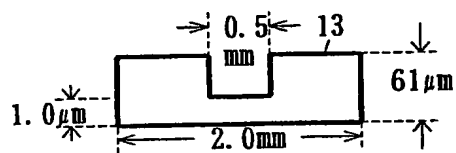
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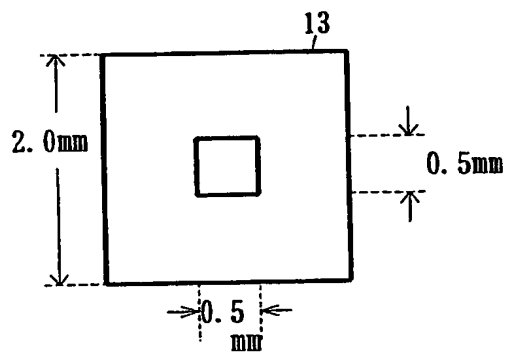
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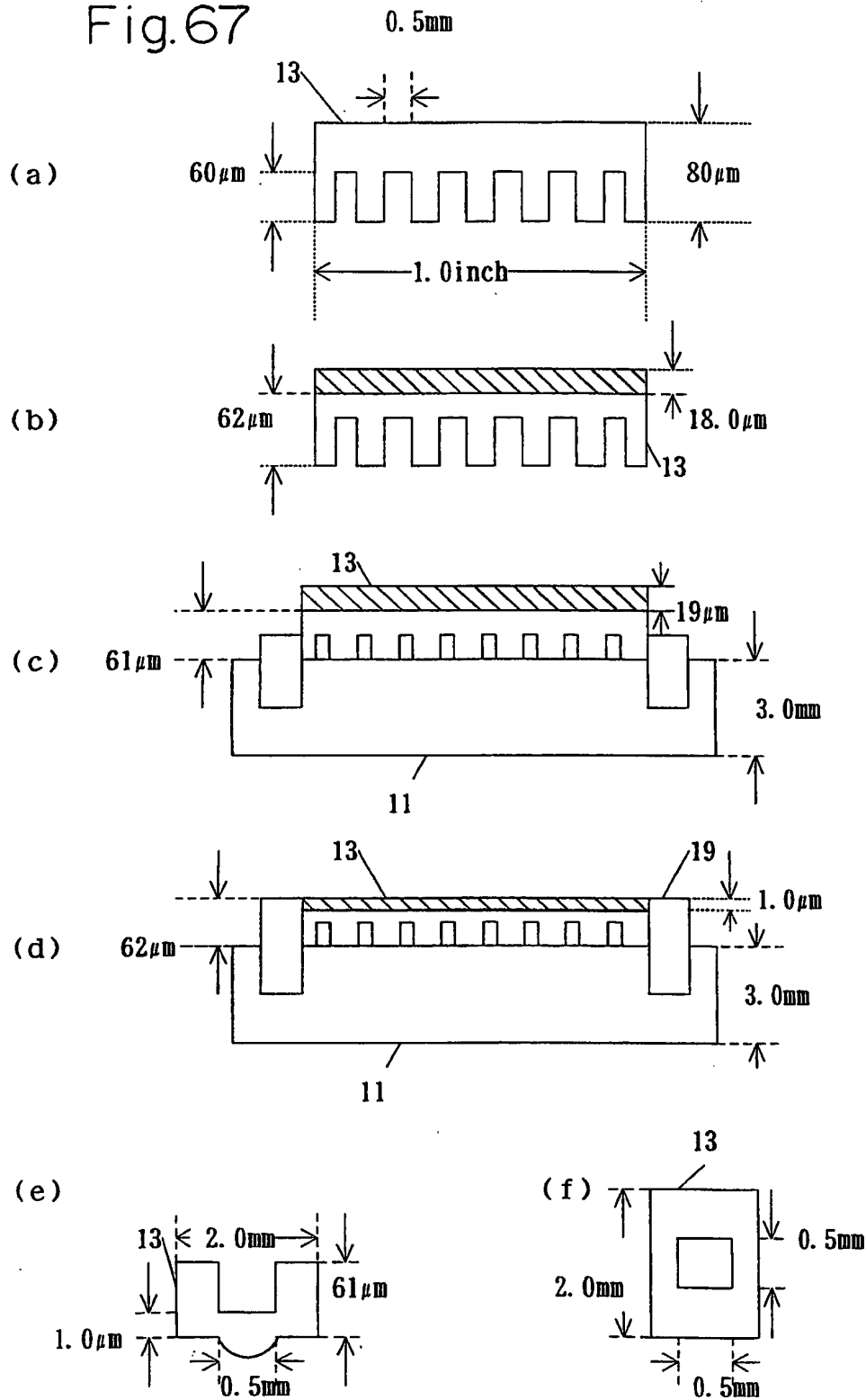


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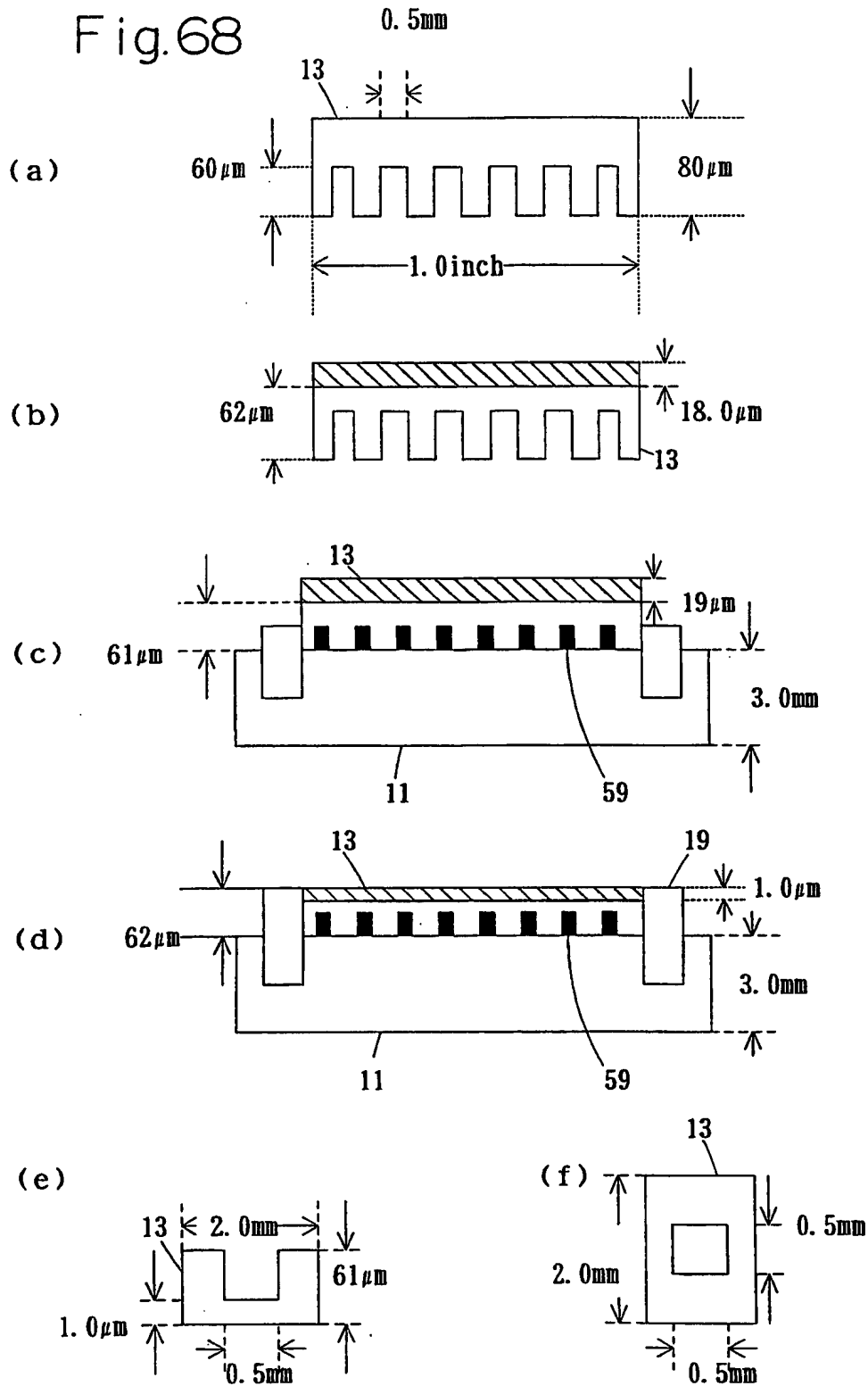
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Fig. 67



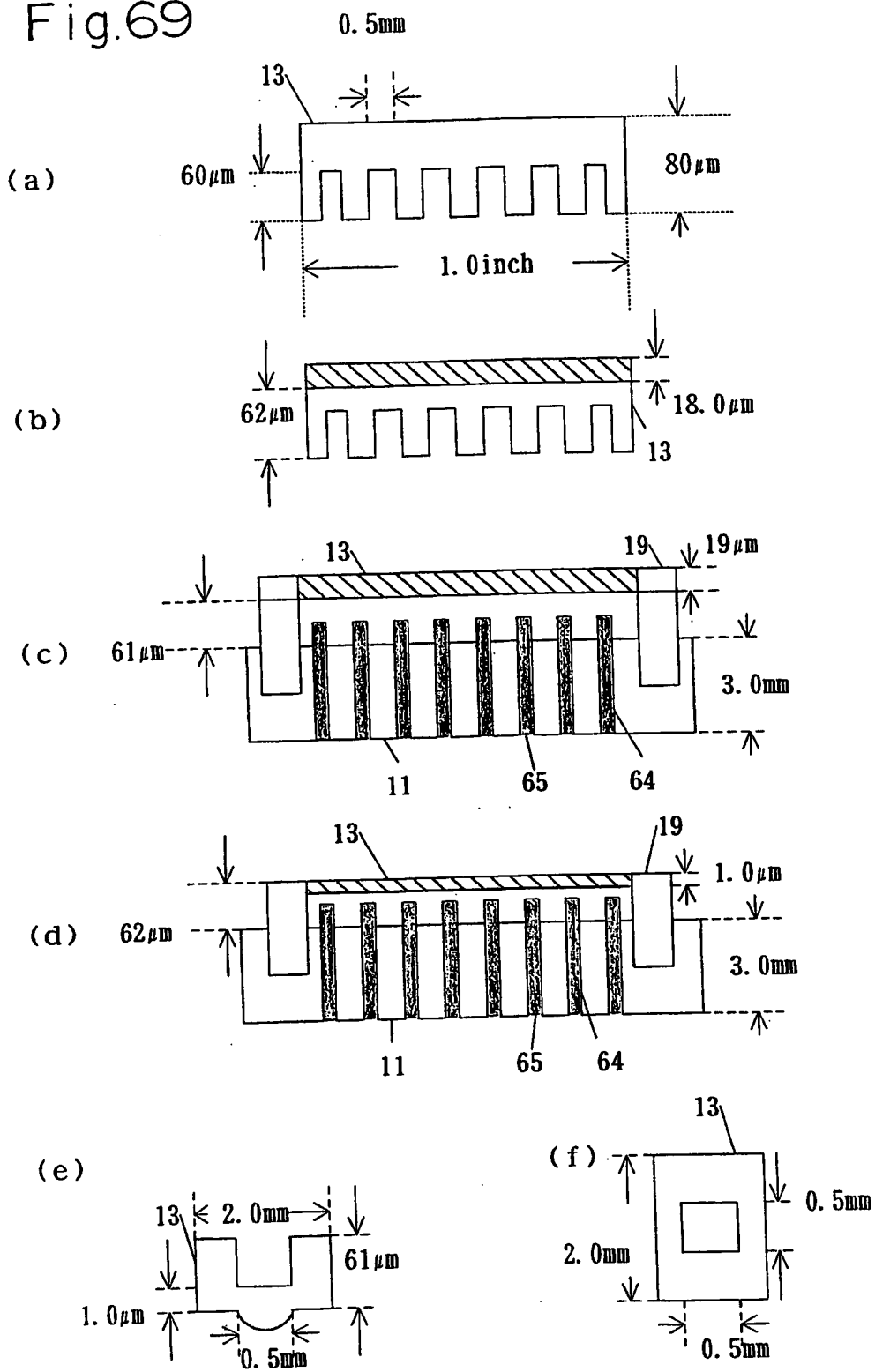
49/82

Fig.68



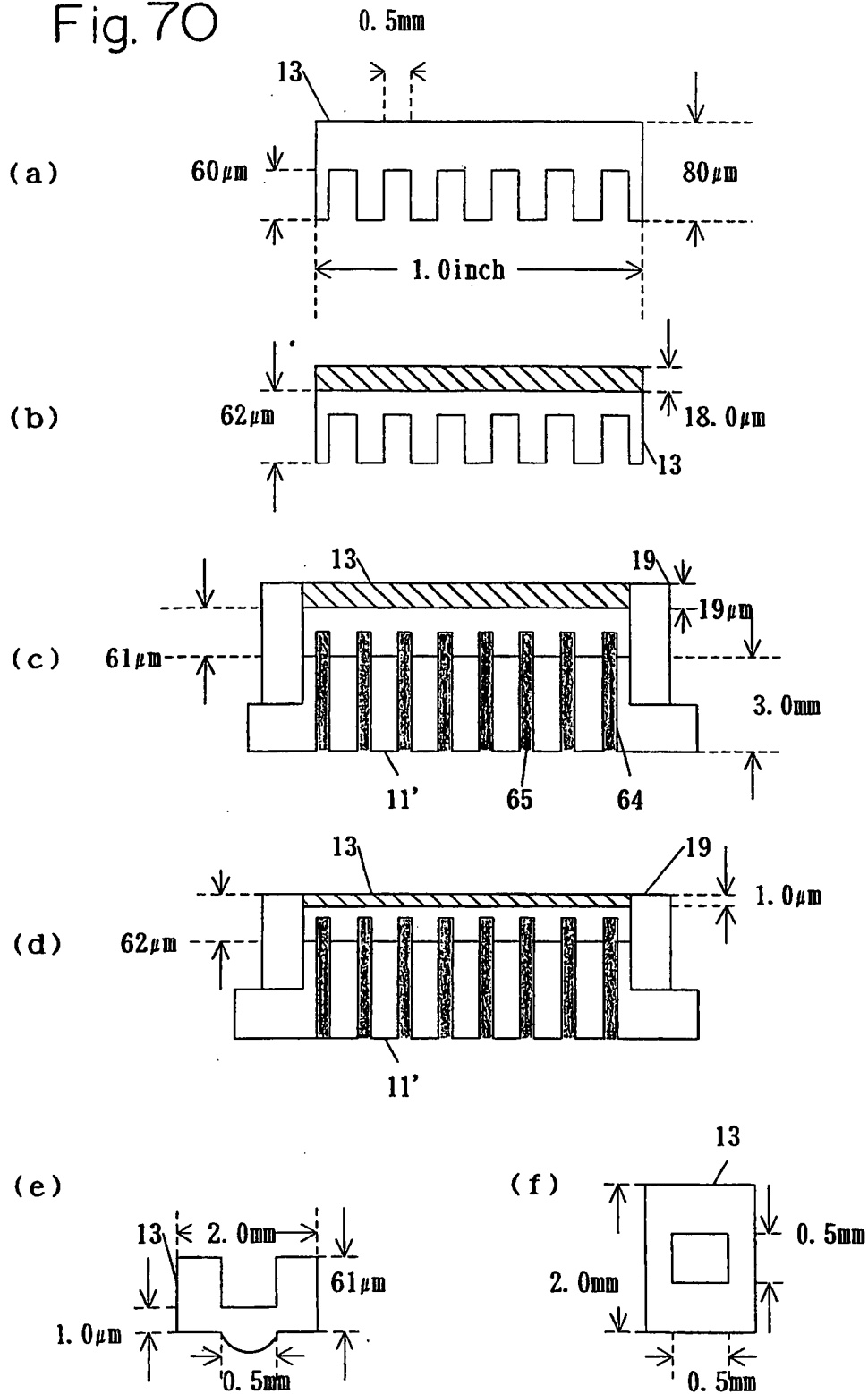
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Fig.69



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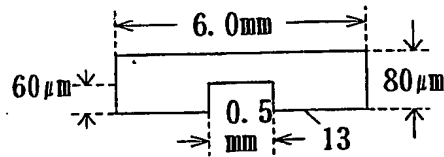
Fig. 70



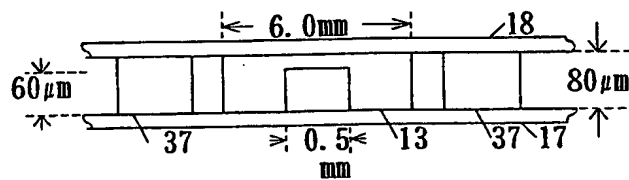
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Fig. 71

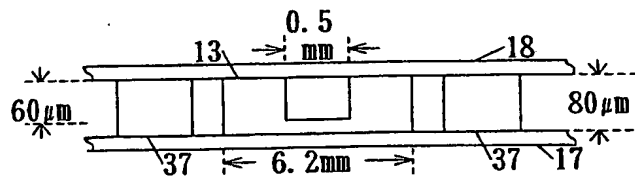
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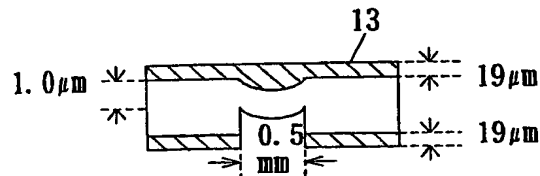
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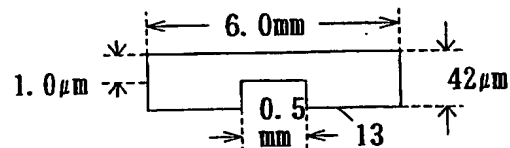
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(d)

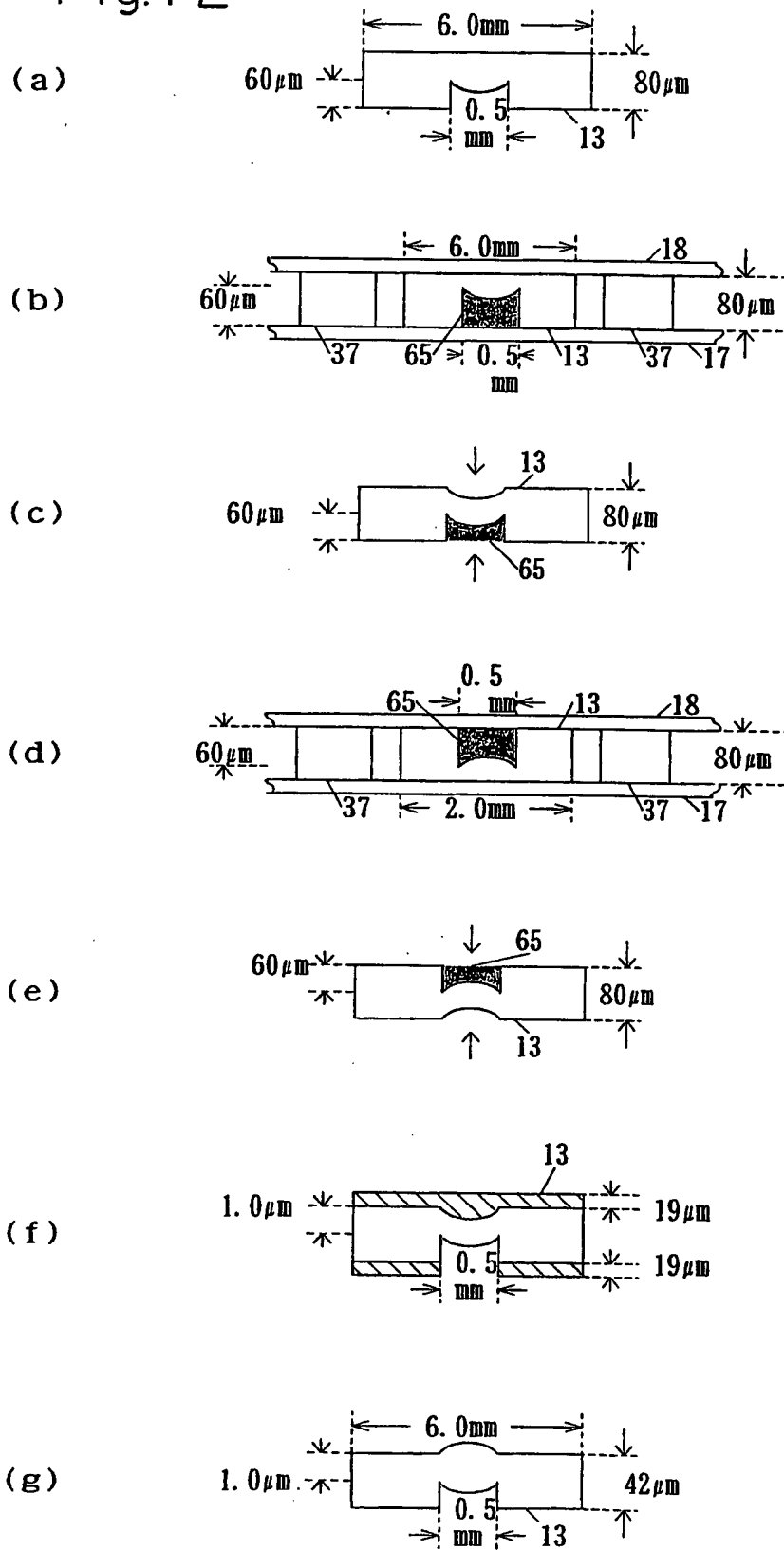


(e)



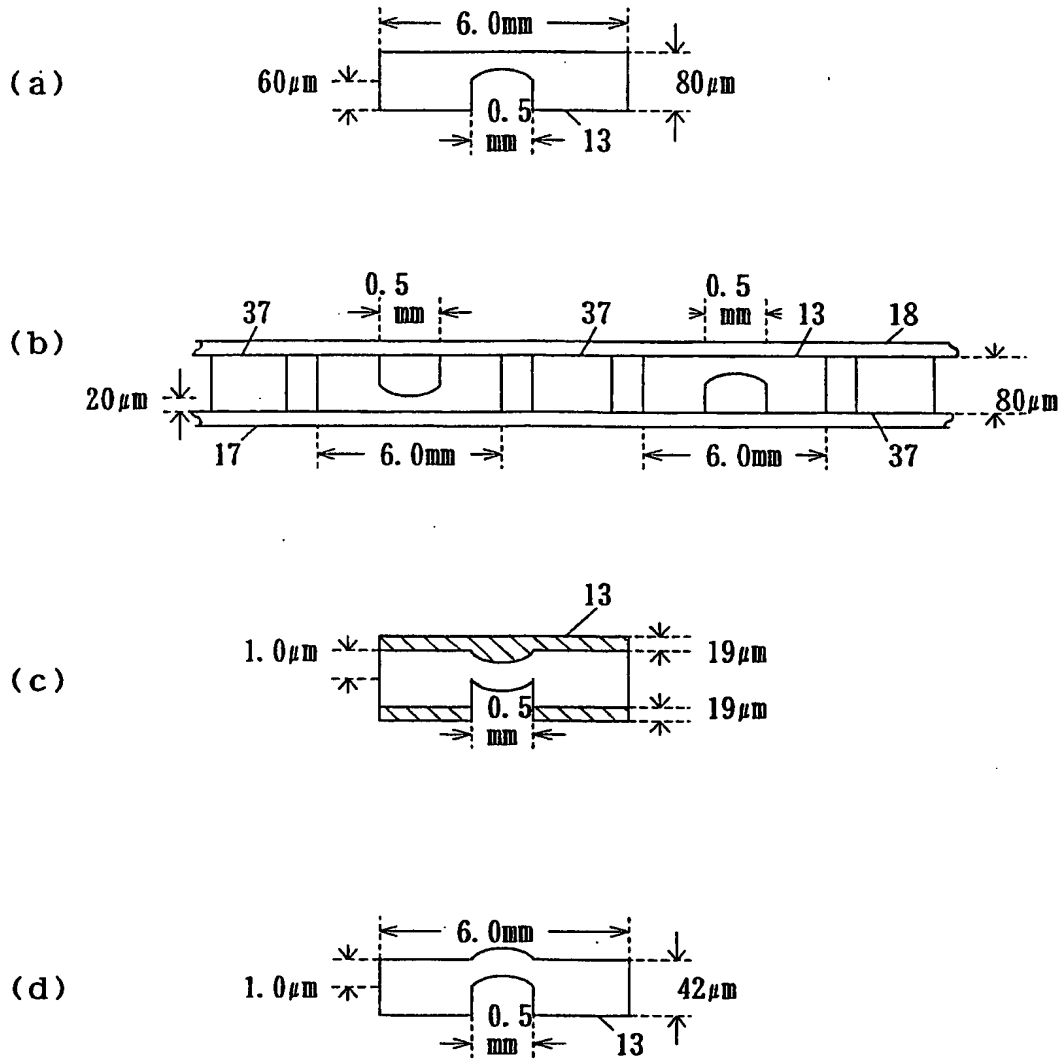
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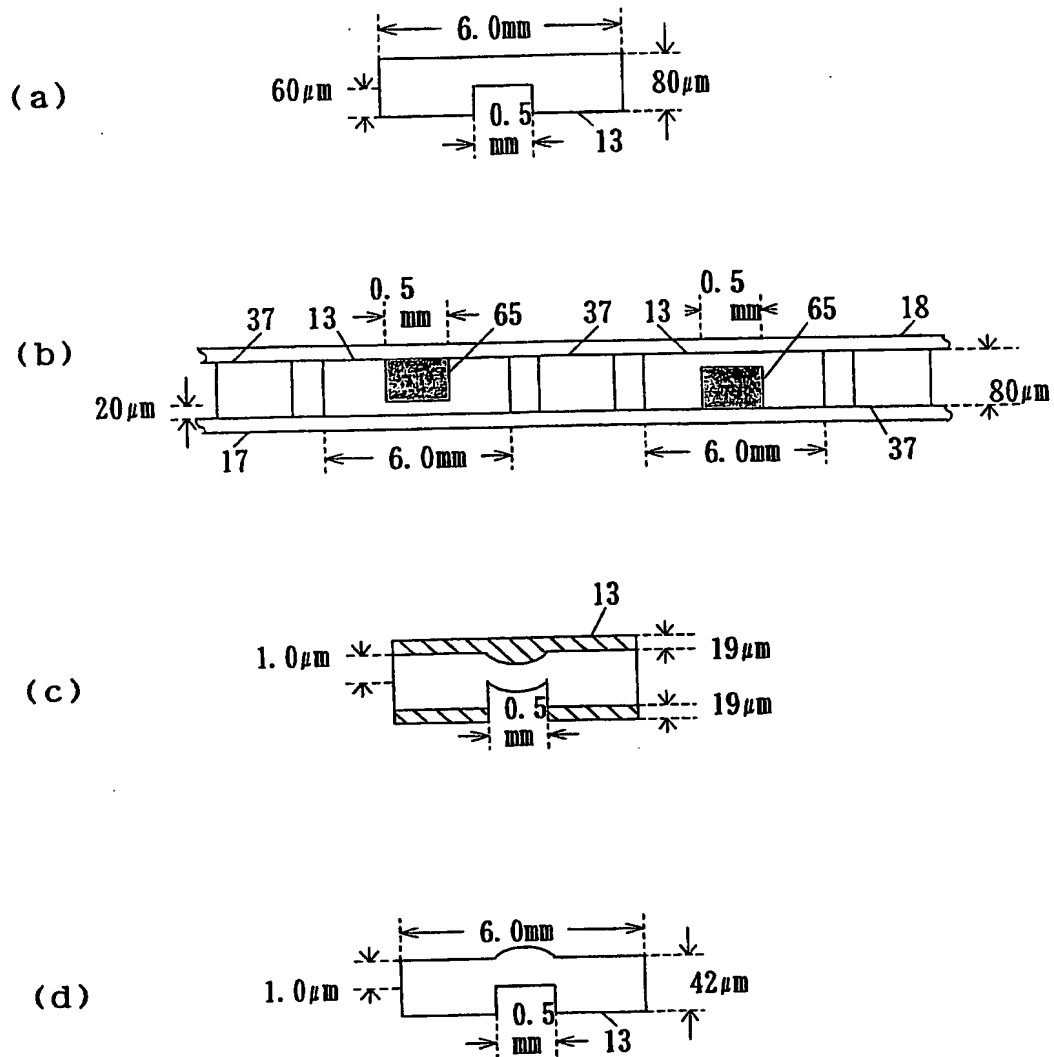
Fig.72

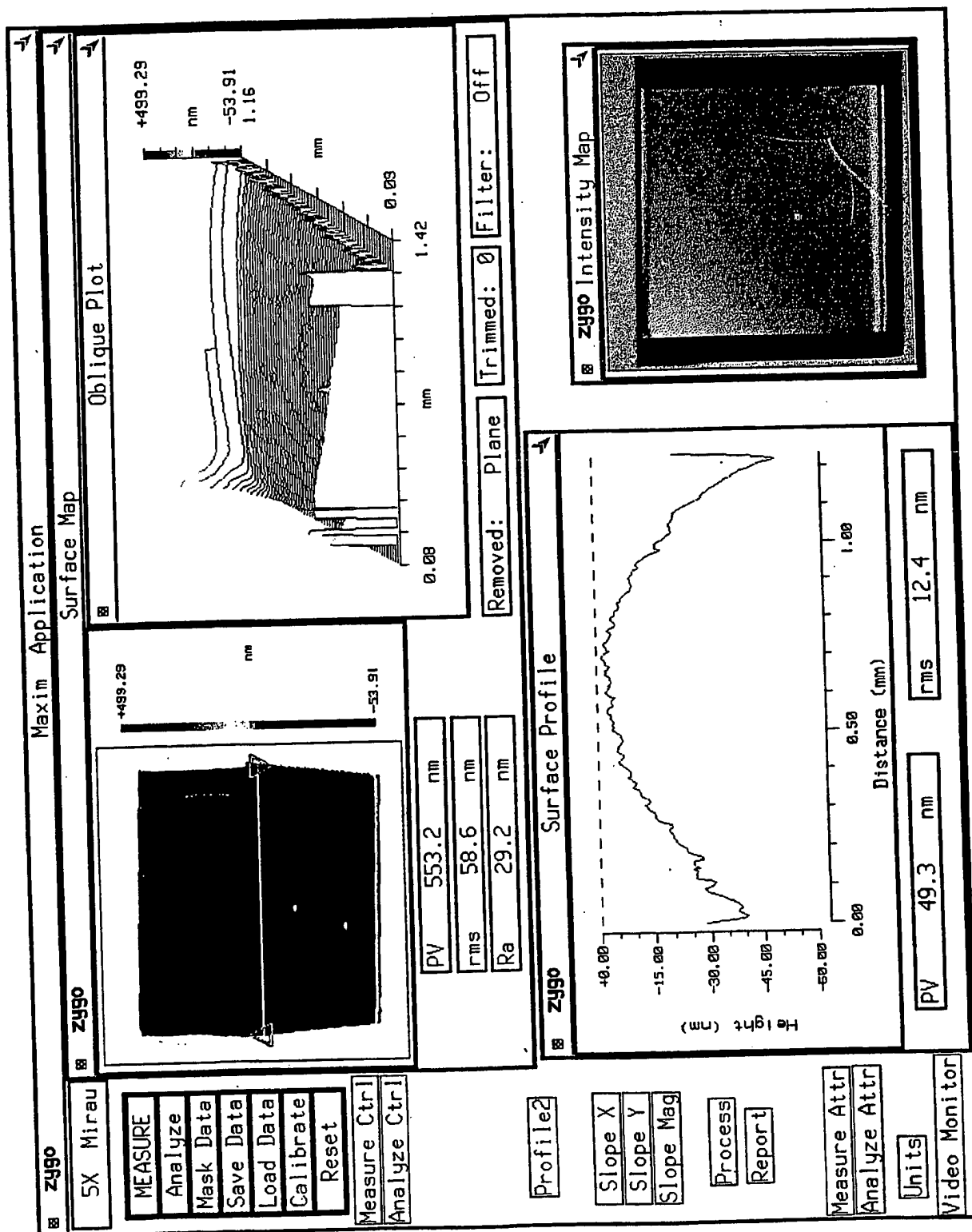


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Fig. 73



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Fig.74

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Fig. 75

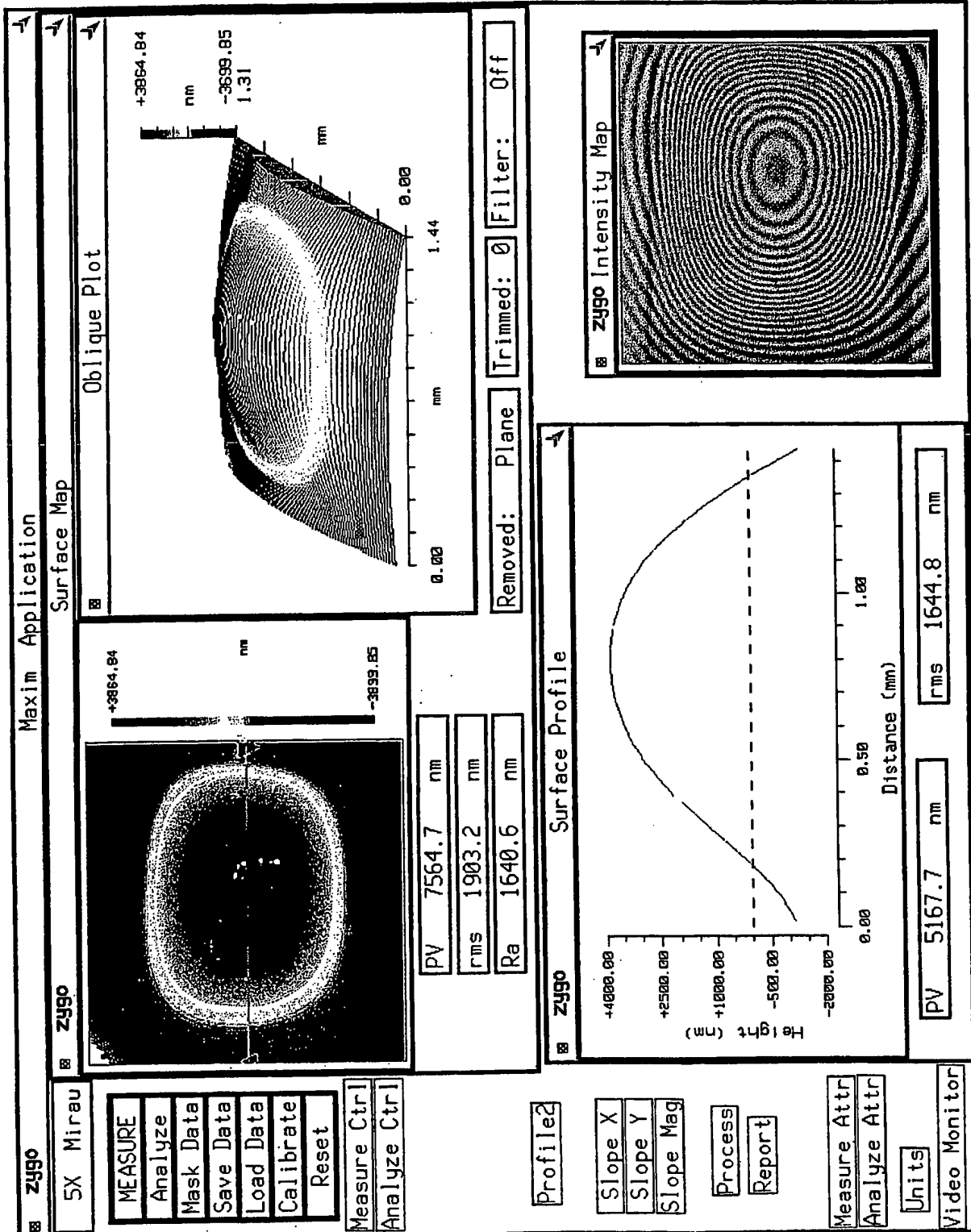
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WO 00/57494

09/914975

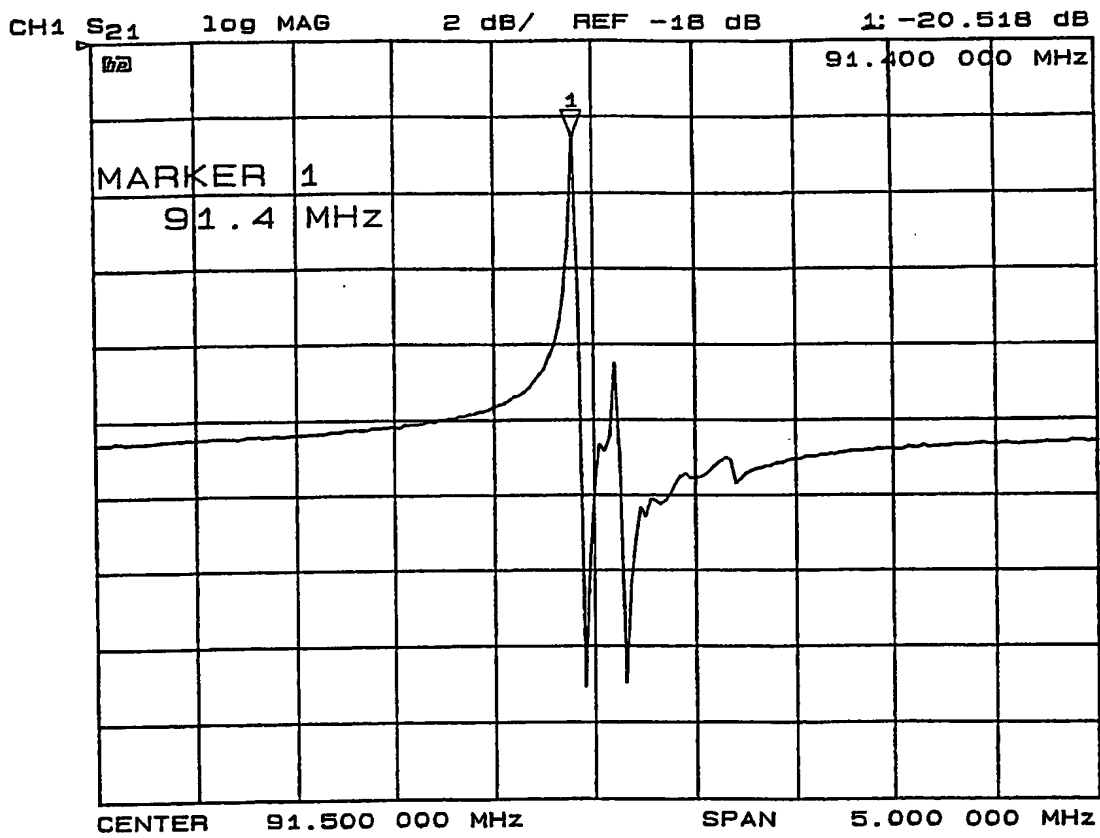
PCT/JP00/01691

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Fig.76



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Fig. 77

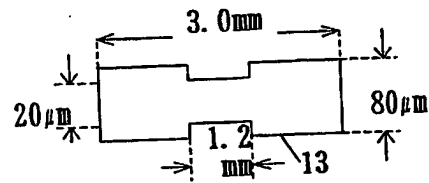


[illegible]

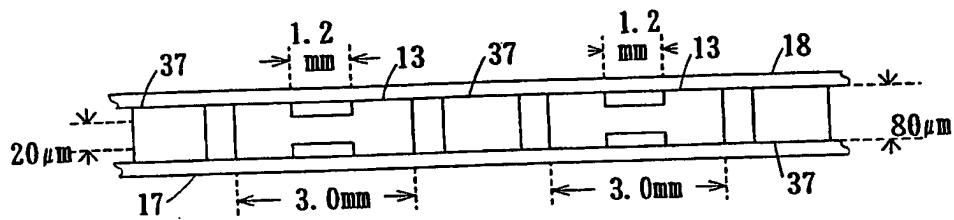
60/82

Fig.79

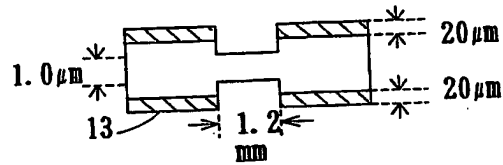
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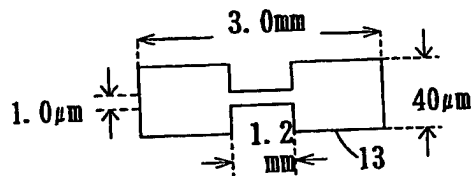
(b)



(c)

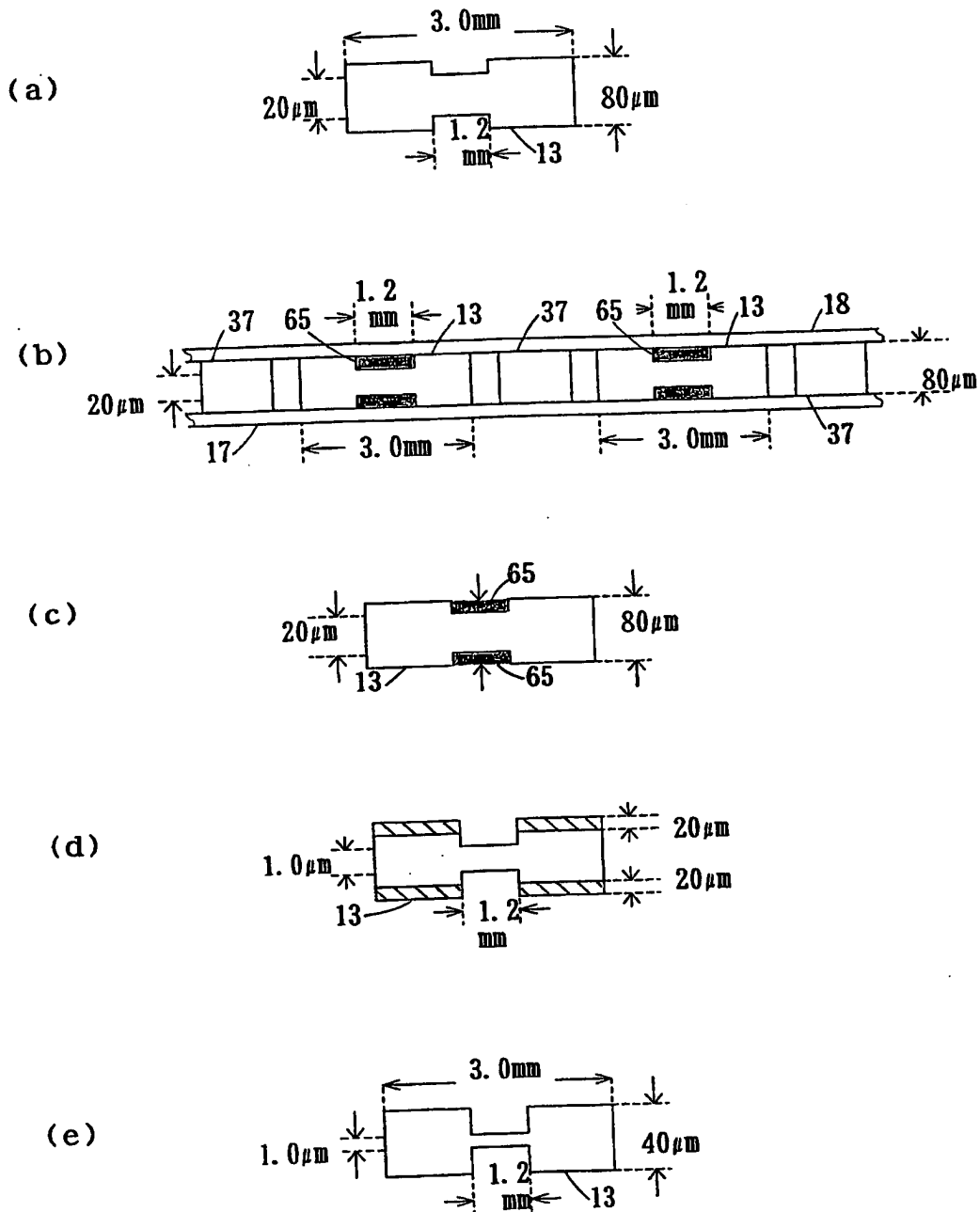


(d)



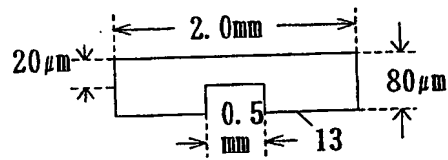
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Fig. 80

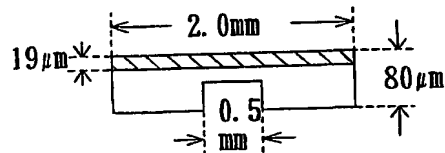


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Fig. 81

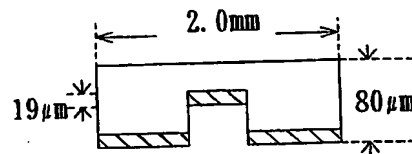
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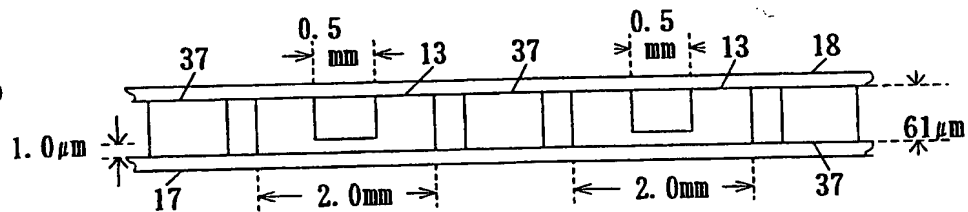
(b)



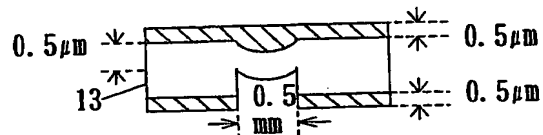
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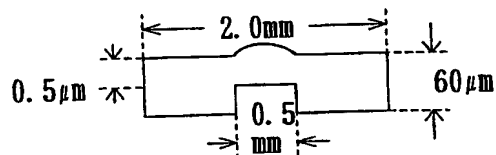
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(e)

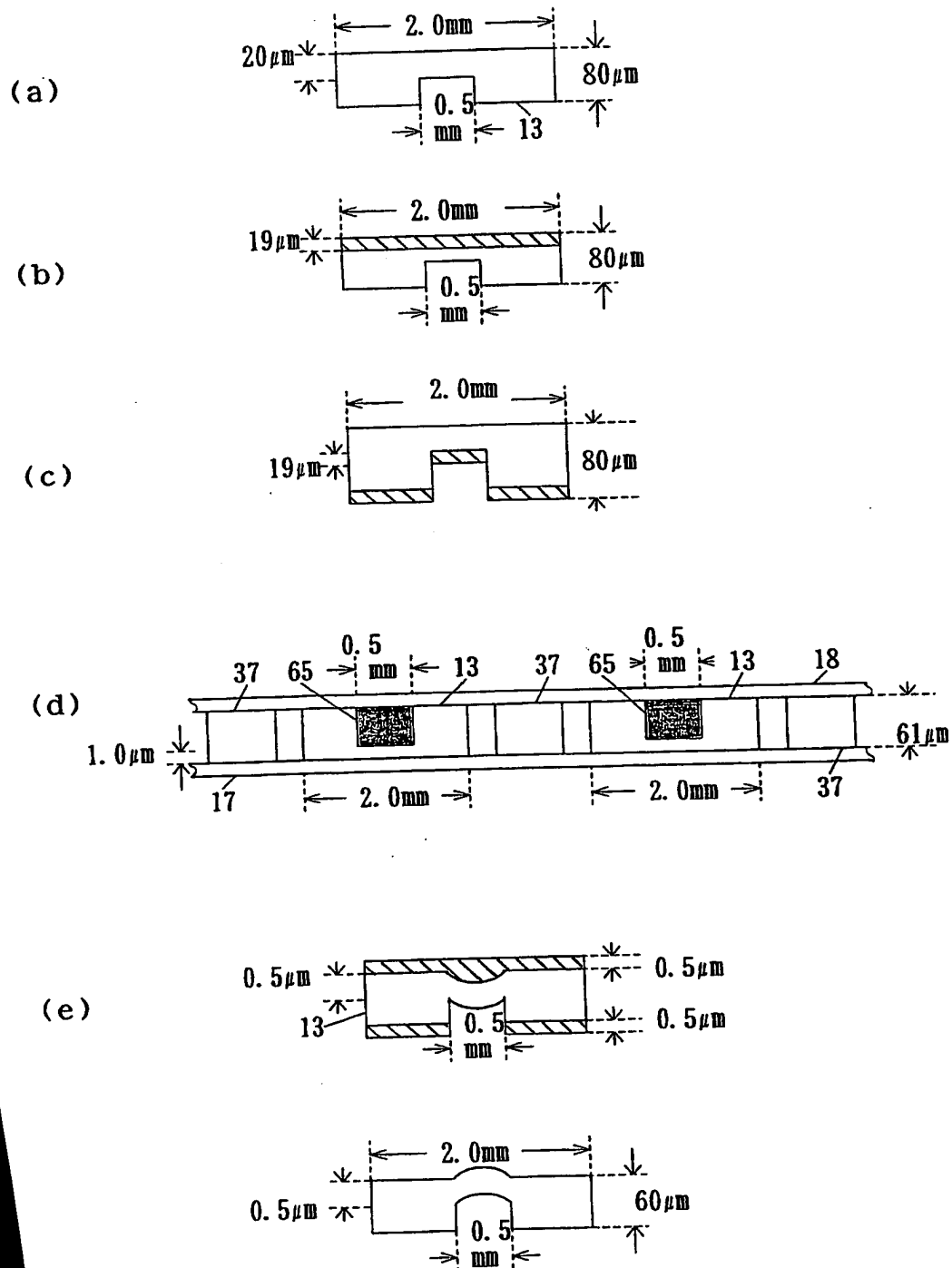


(f)



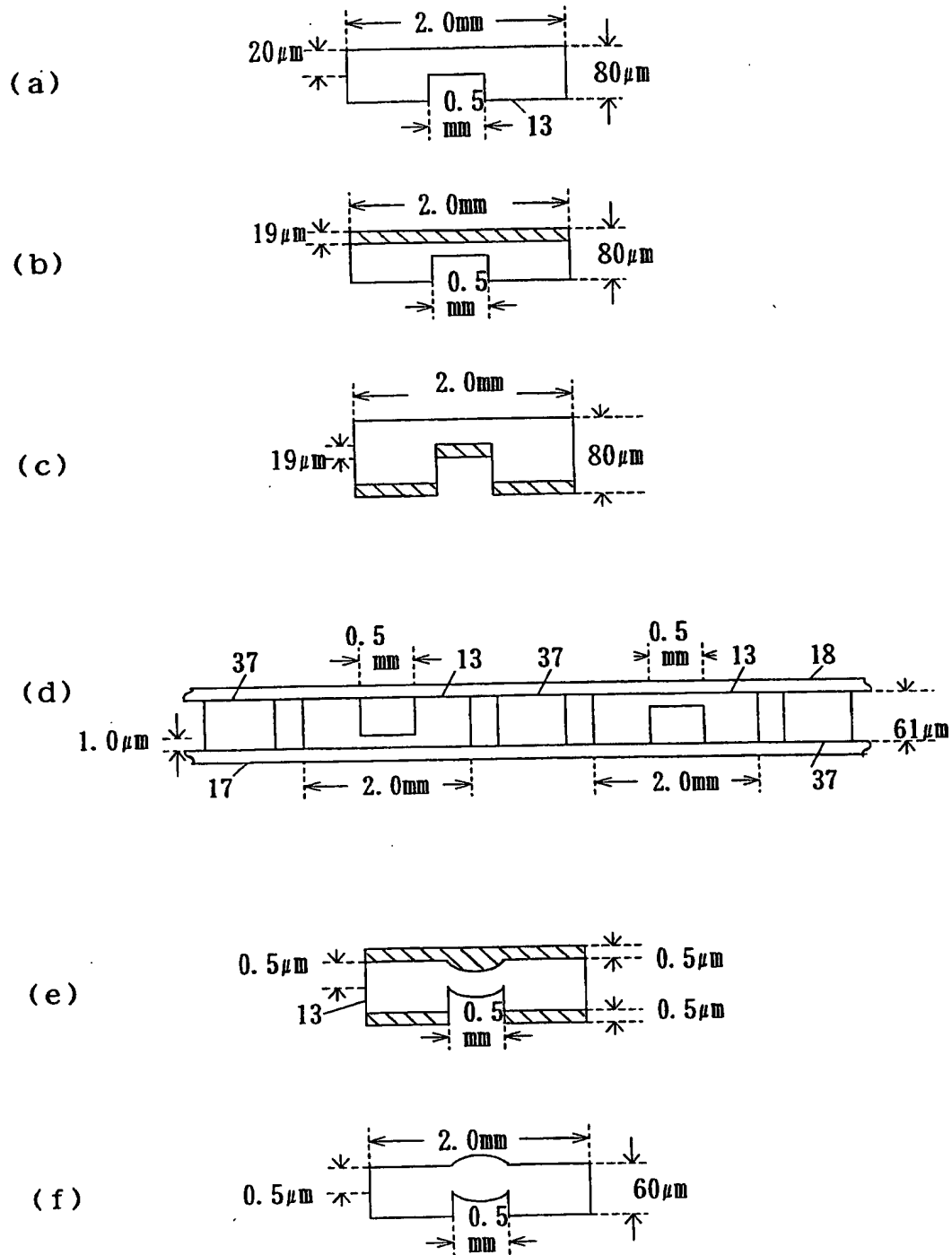
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Fig. 82



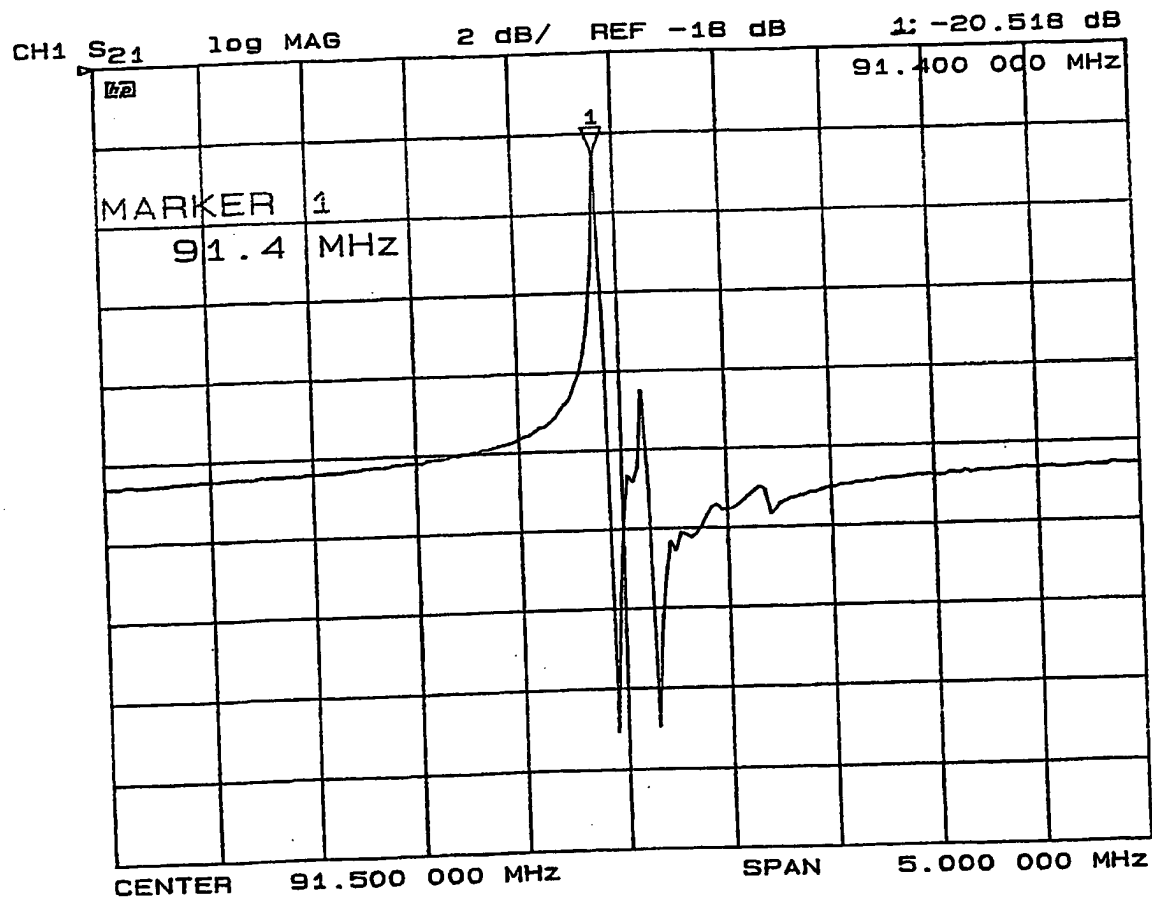
64/82

Fig. 83



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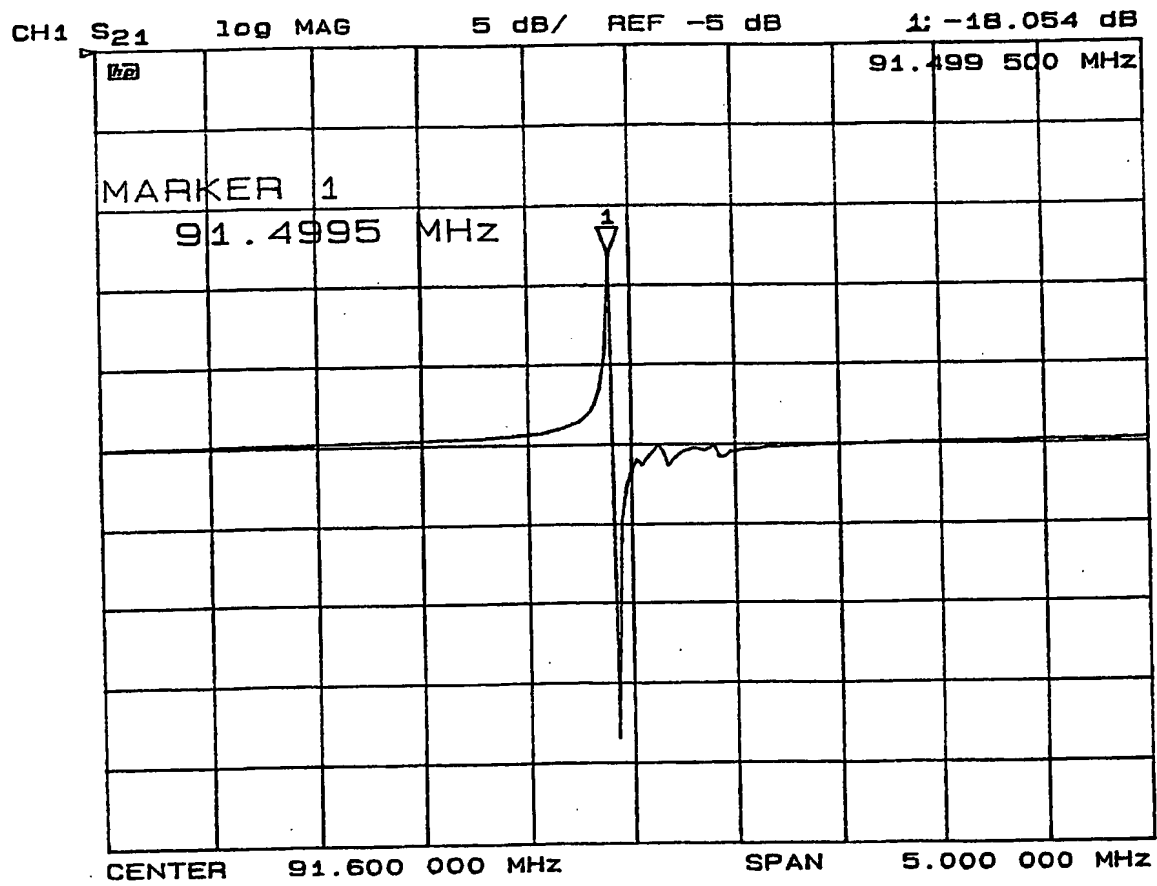
Fig. 84



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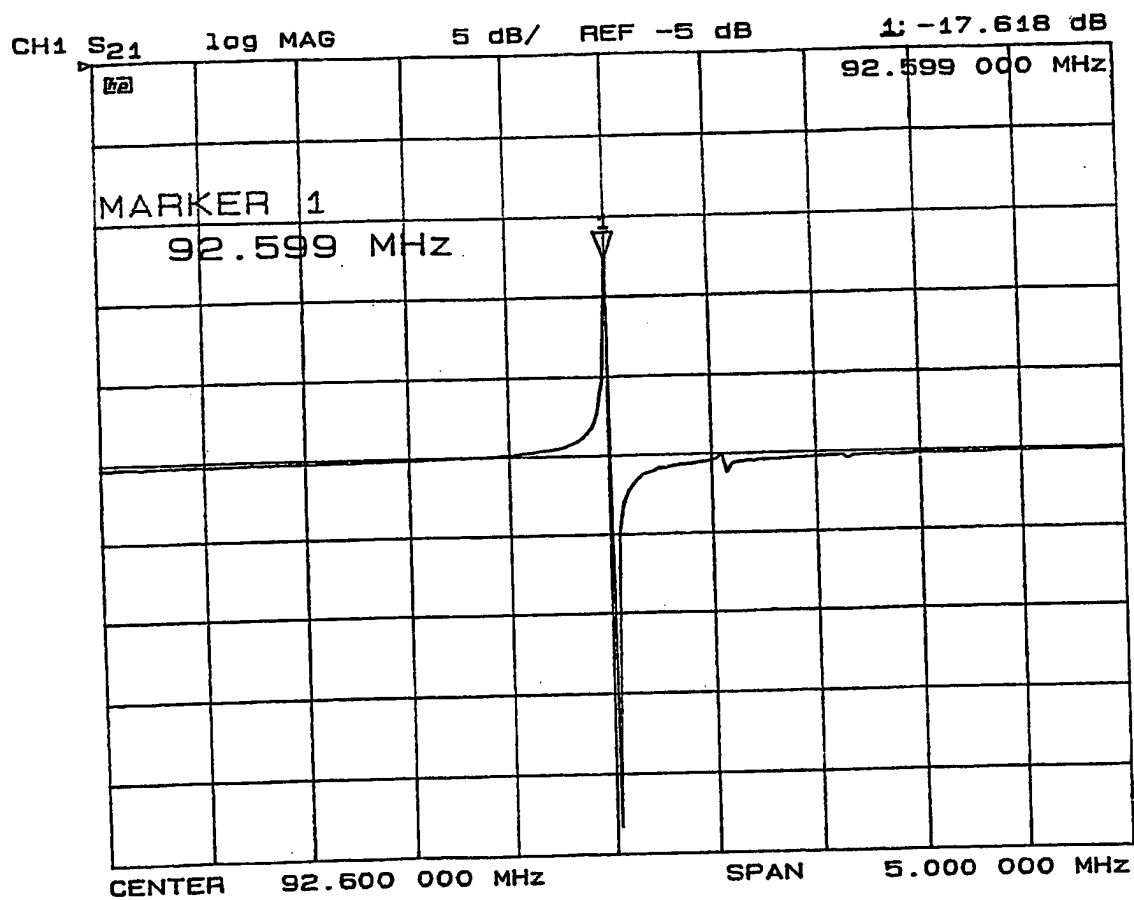
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Fig. 85



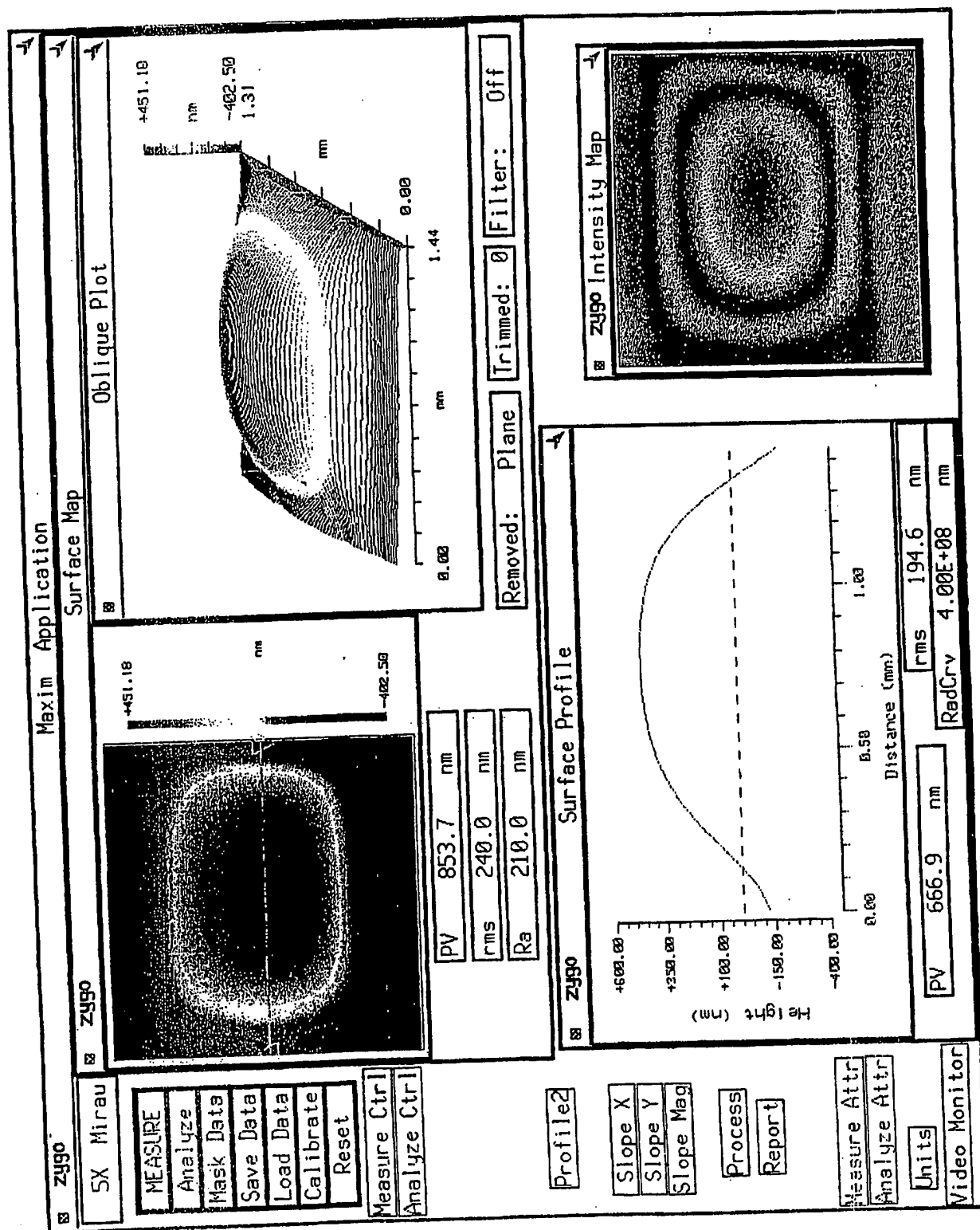
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Fig. 86



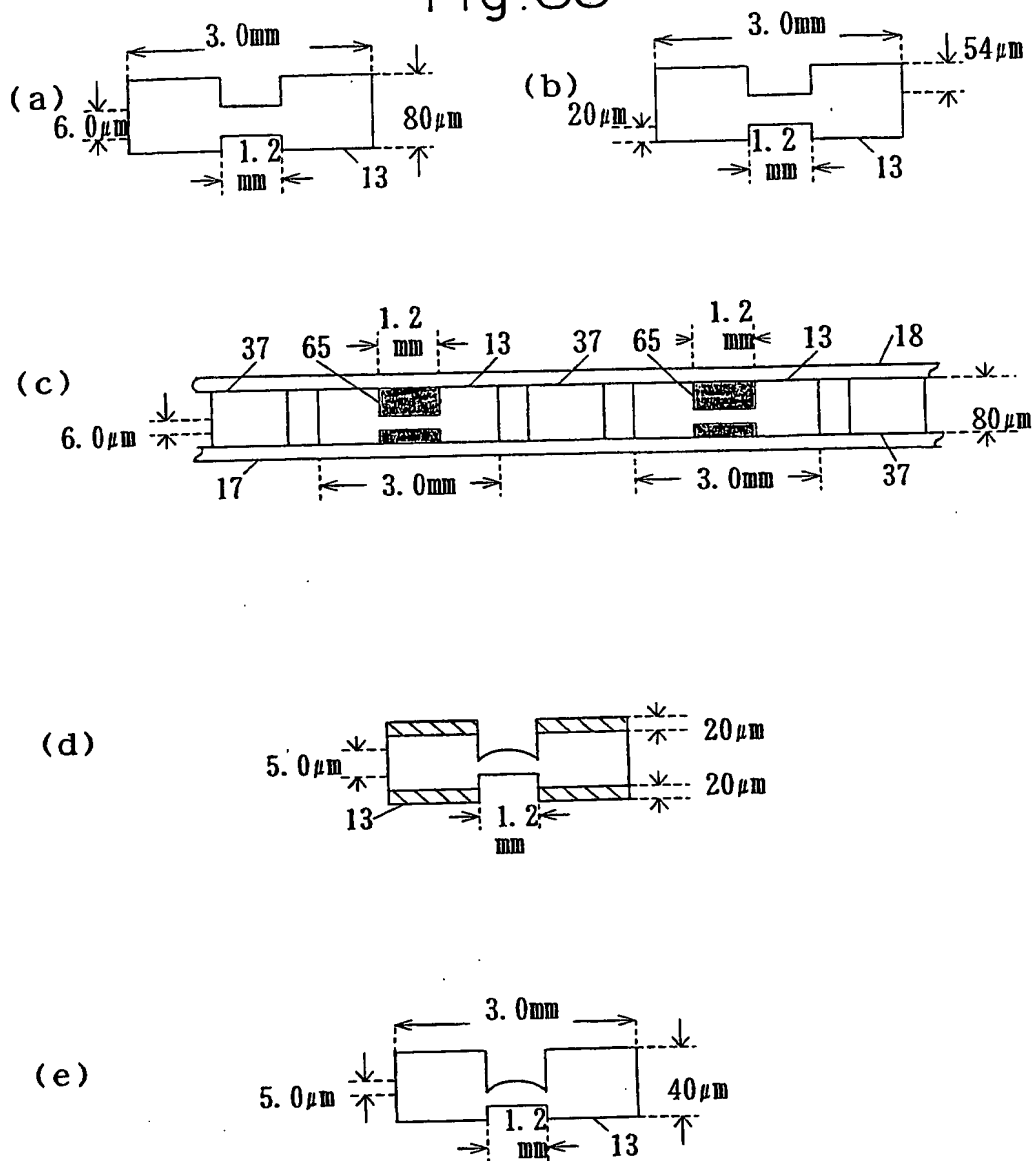
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Fig. 87



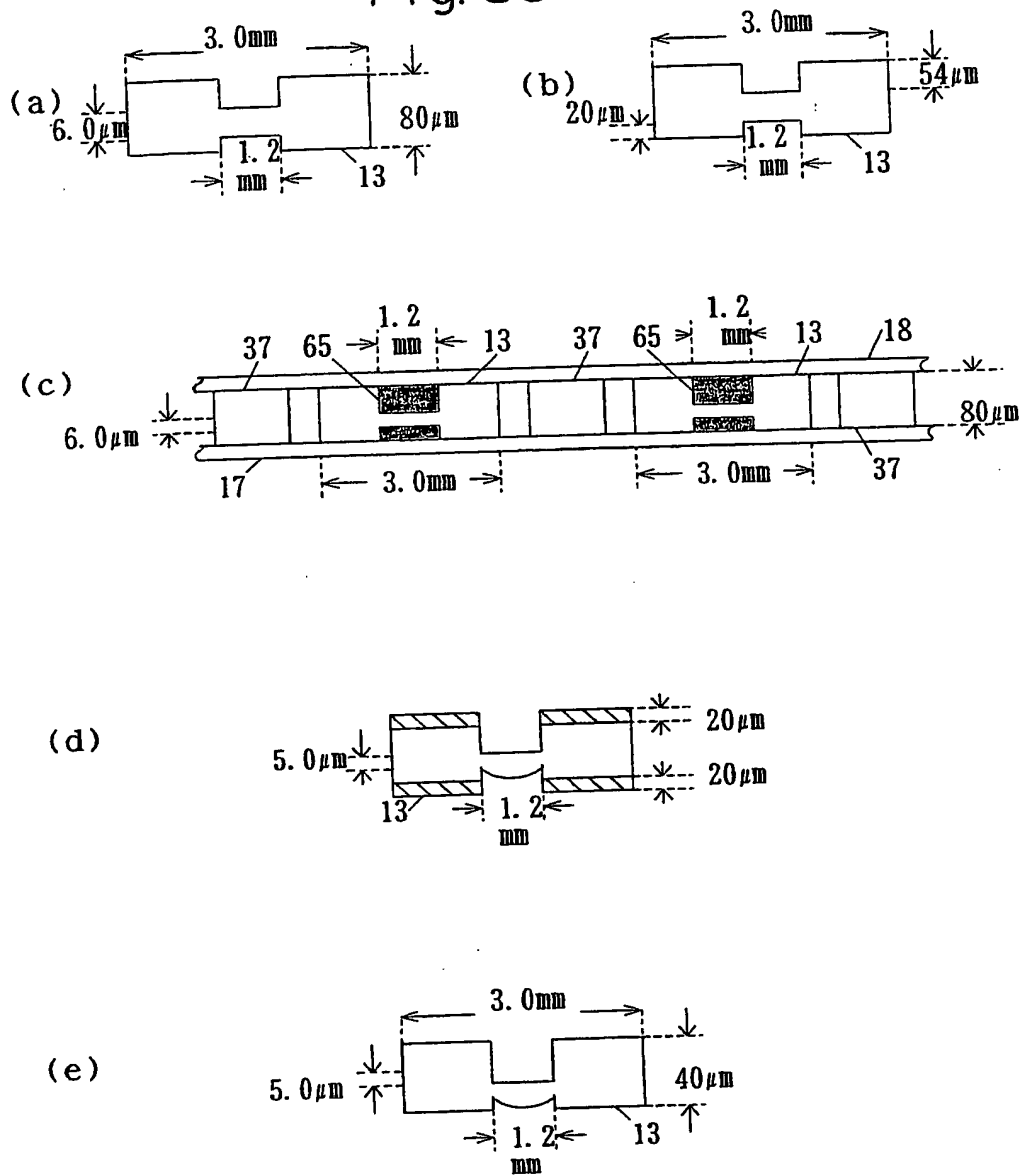
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Fig. 88



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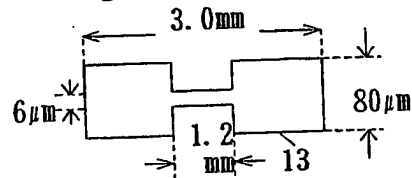
Fig. 89



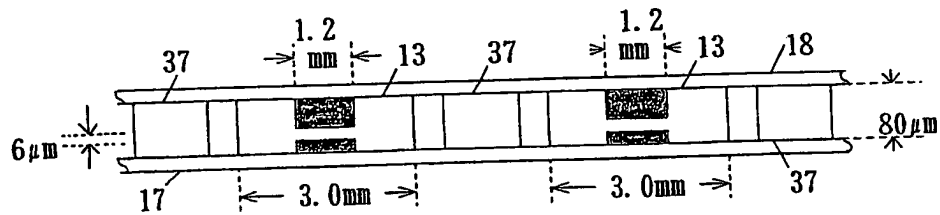
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Fig.90

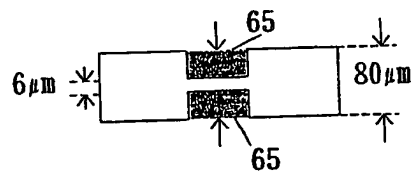
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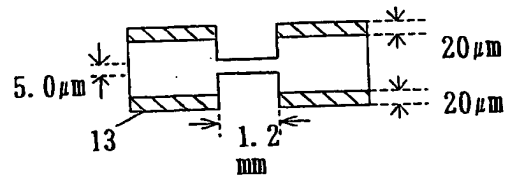
(b)



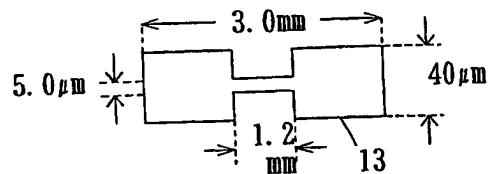
(c)



(d)

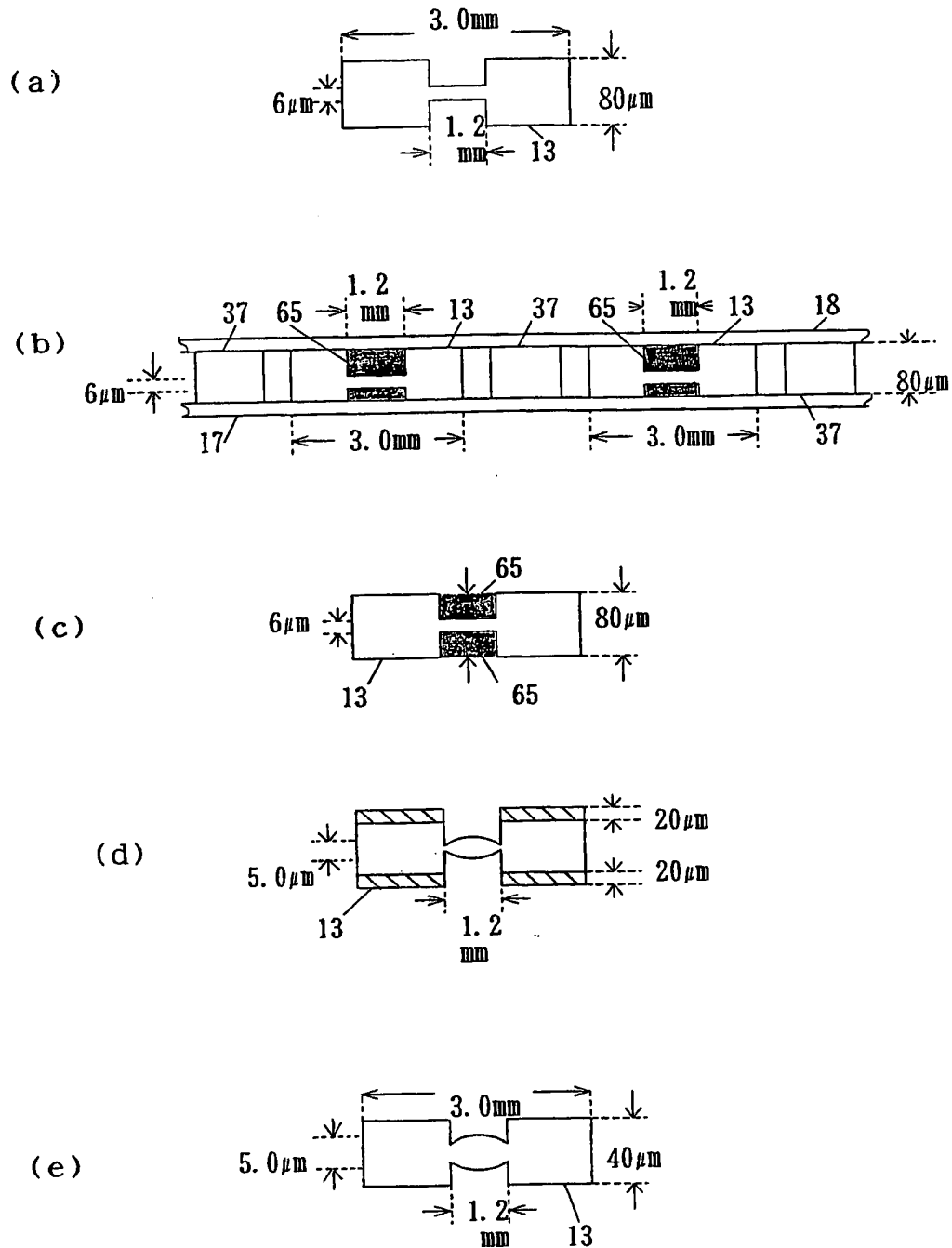


(e)



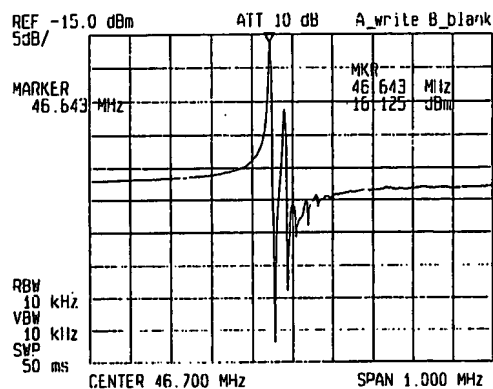
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Fig. 91

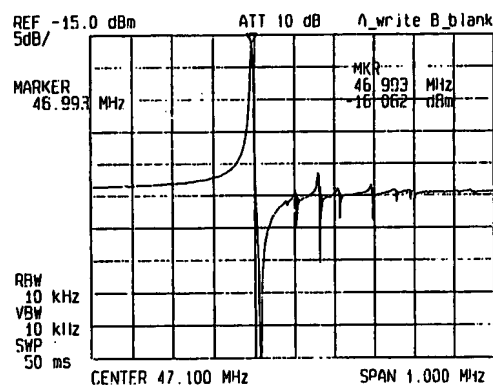


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Fig.92



(a) RIE

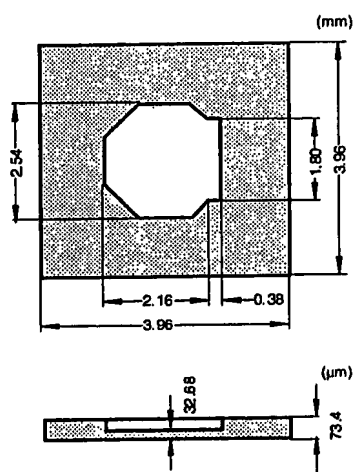


(b) Mechanical polishing after RIE

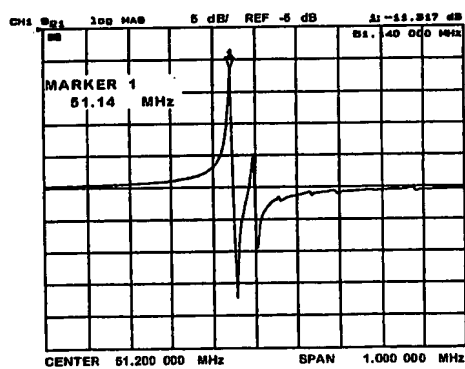
Fig. 1 Reactance-frequency characteristics
 RIE : RF power 240 w, Press. 6.7 Pa,
 Gas C₂F₆, 20 sccm

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Fig.93



(a) Initial shape of machining material



(b) Reactance-frequency characteristics

Fig. 2 Machining material used

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Fig. 94

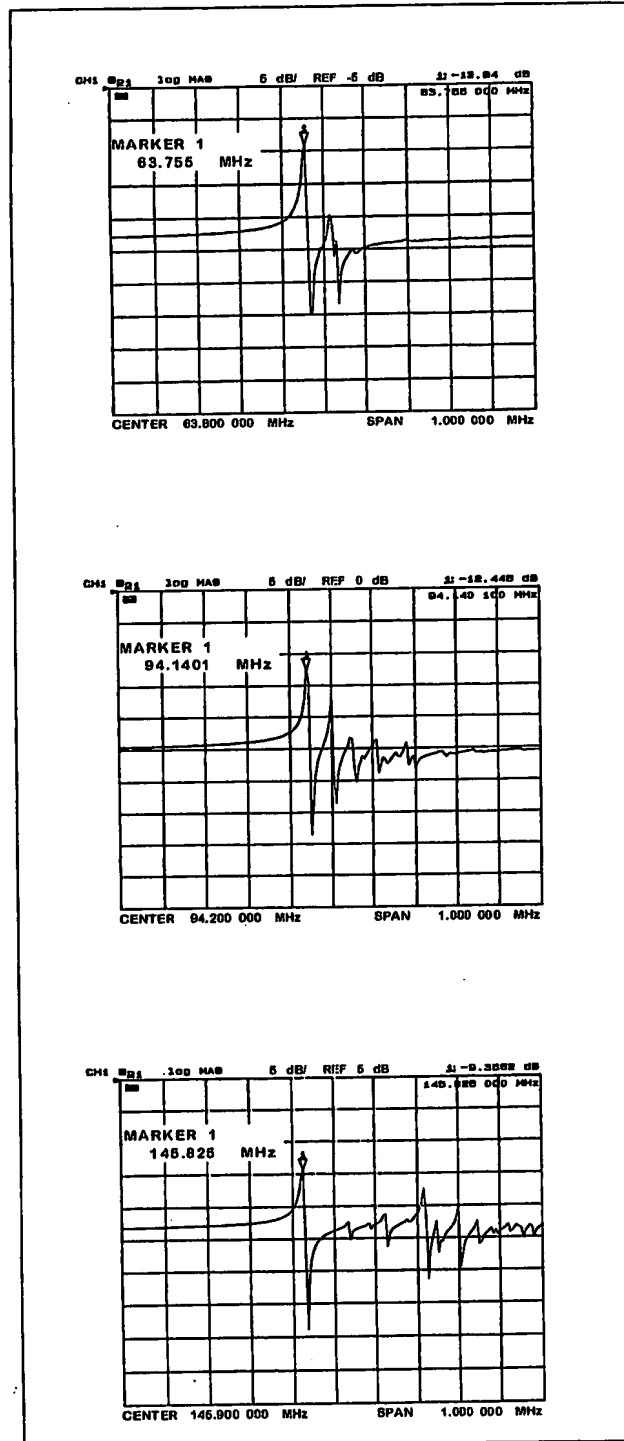


Fig. 3 Reactance-frequency characteristics of machining blanks after RIE

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Fig. 95

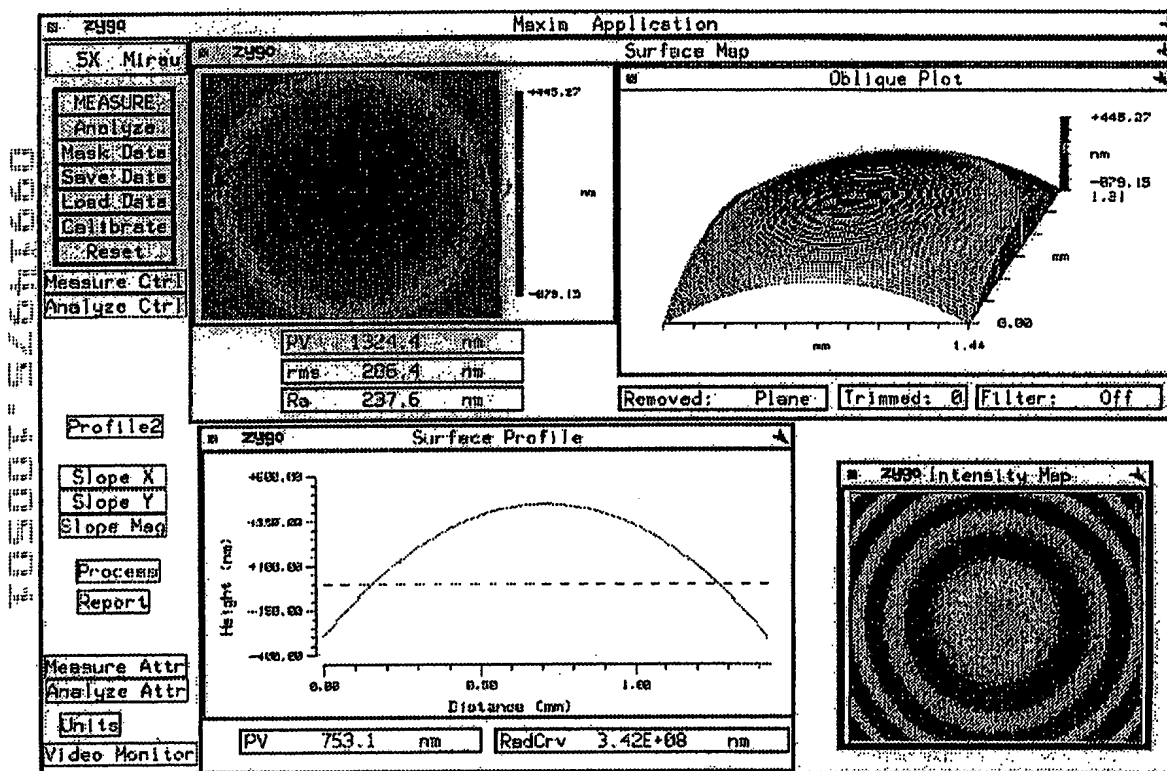


Fig. 4 Measured shape of the flat side oscillating part of the single inverted mesa type quartz blank by using an interference microscope

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Fig. 96

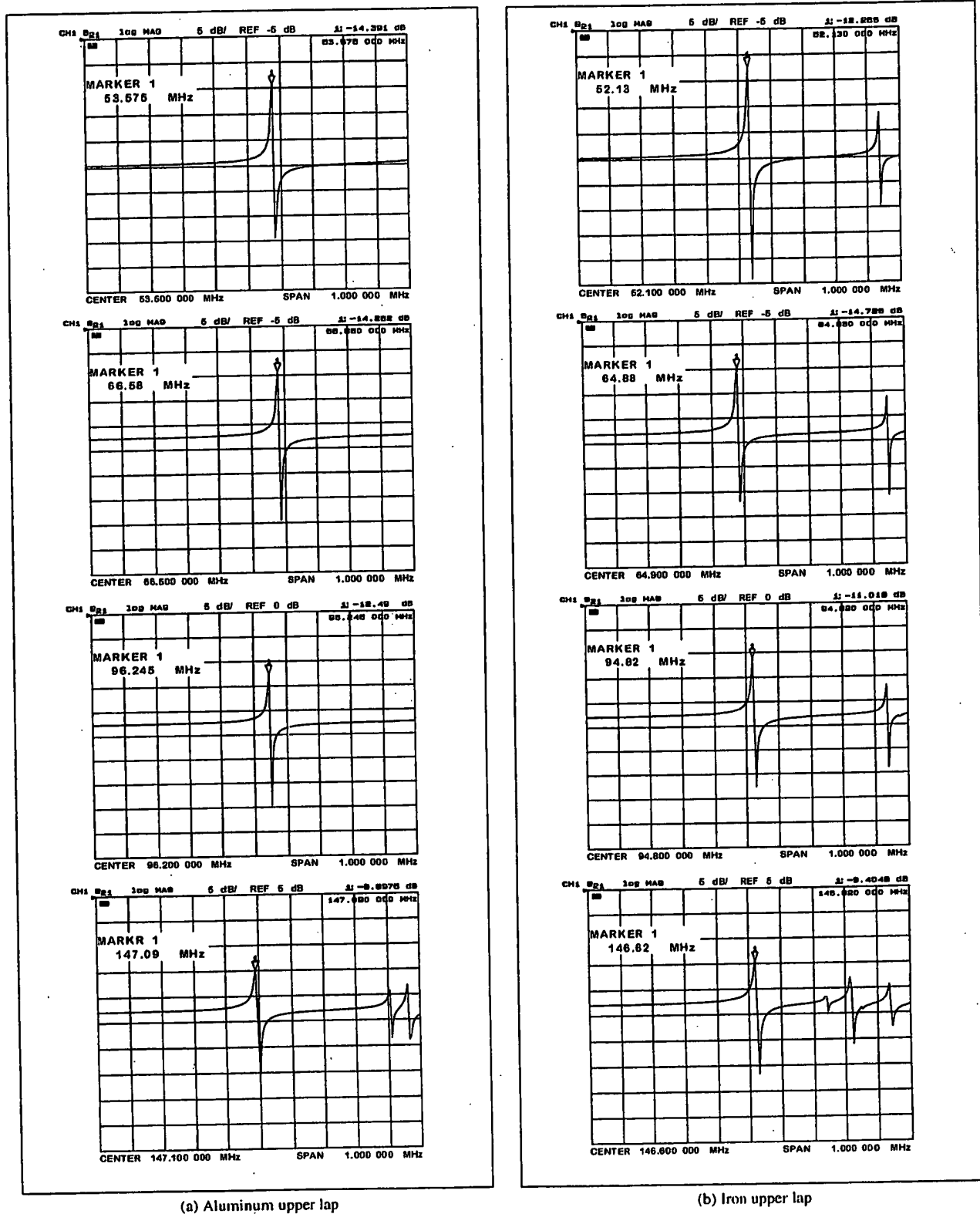


Fig. 5 Reactance-frequency characteristics of blanks polished

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Fig.97

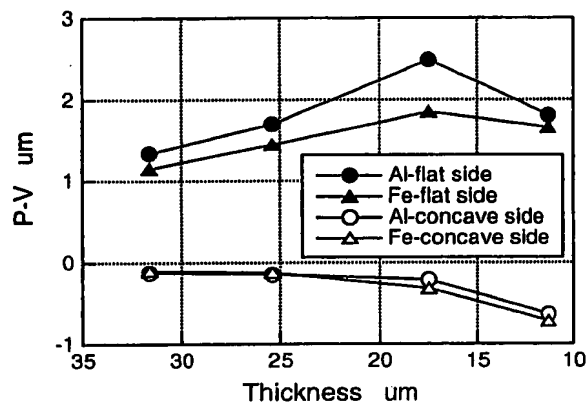


Fig. 6 Peak to valley of the central oscillating part

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Fig. 98

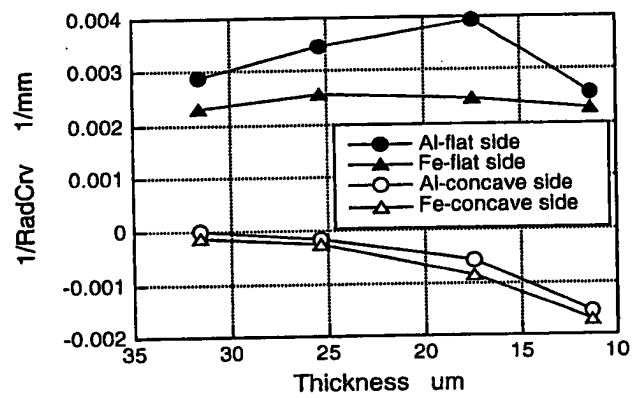


Fig. 7 Curvature radius of the central oscillating part

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Fig.99

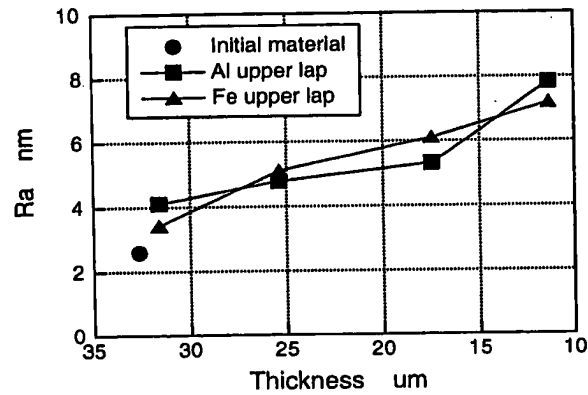
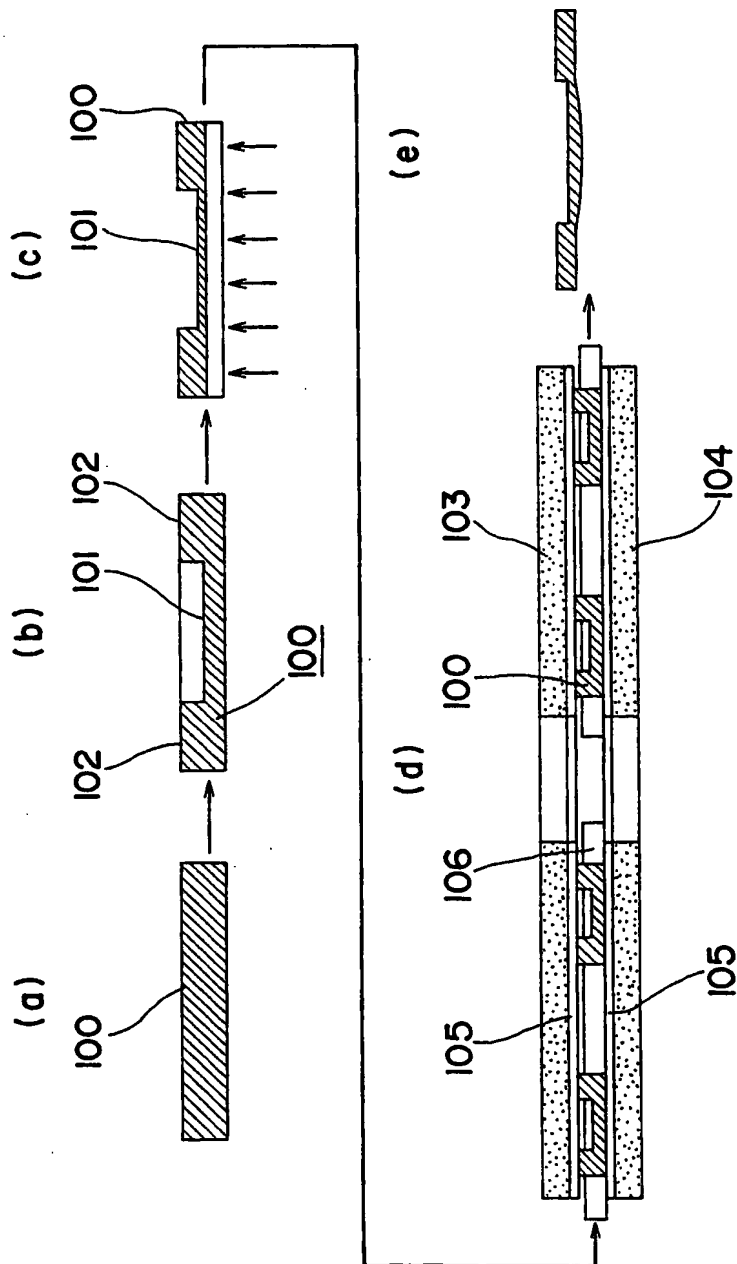


Fig. 8 Surface roughness at the central concave

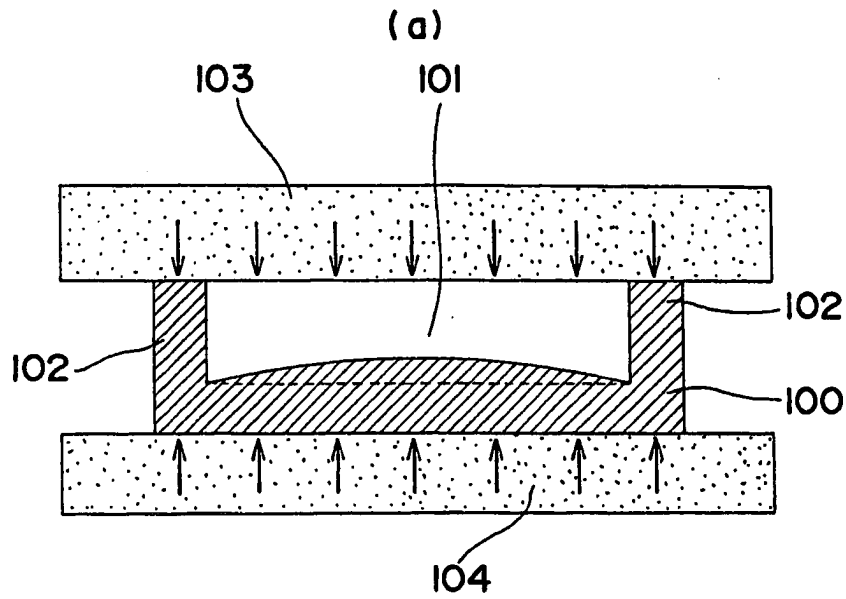
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Fig.100



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Fig.101



(b)

